

WRITE FOR A SAMPLE OF  
**DR. WOOD'S**  
**HEALTH SALINE**

IN SMARTLY LITHOGRAPHED ROUND LEVER-LID TINS.



**G**REAT care has been taken in the compilation of the formula, and the result is a product in every way satisfactory.

The effervescence is prolonged, yet animated; the flavour is pleasant, leaving a slightly acid "clean" taste.

**HANDSOME SHOW MATERIAL PROVIDED.**

**6/9** doz.; gross lots **78/-**

**ARTHUR H. COX & CO. LTD**  
**Manufacturing Chemists**  
**BRIGHTON ENGLAND**



*Established 1839.*

The  
Famous Natural Aperient Water

# Hunyadi János

---

An extensive advertising campaign is now being conducted in the Medical and General Press which is stimulating the demand for this well-tried natural Aperient Water.

Full supplies are once more being imported, and all orders can be filled without delay.

---

Hunyadi János has for more than fifty years been recognised as the best of the **NATURAL** mineral waters containing sulphate of soda and sulphate of magnesia. Its laxative action is sure but gentle; it stimulates the liver and cleanses the blood.

---

Many of your customers who already know its value will be glad to get it again. Others will want to buy it on the recommendation of their doctors, who constantly prescribe HUNYADI in preference to ordinary aperients.

---

Have you sent your order? If not, do so without delay and thus place yourself in a position to participate in this profitable business.

---

24/- per doz. large bottles or 48/- per case of 25  
18/- „ „ small „ „ 72/- „ „ of 50

Net, free delivery in London or any station in Great Britain.

Minimum Retail Prices :

2/6 per large bottle.                      2/- per small bottle.

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Sole Wholesale Depot :

**INGRAM & ROYLE, LTD.**

BANGOR WHARF, 45 BELVEDERE ROAD, LONDON, S.E. 1

19 South John Street, Liverpool.      Bath Bridge, Bristol.



Under the Auspices of  
The Manchester Pharmaceutical Association.

## **MANCHESTER CHEMISTS' EXHIBITION**

**CITY HALL, MANCHESTER,**

MONDAY, NOVEMBER 20th, to SATURDAY, NOVEMBER 25th, 1922.

### **A few reasons why you should exhibit.**

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Manchester is in the centre of the most thickly populated area in the country—not even excepting London.

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**Every Chemist and Druggist, manufacturing, wholesale and retail, also Doctors, Nurses, Hospitals and Nursing Homes will receive a special invitation and two free admission tickets.**

**TWO-THIRDS OF THE VAST CITY EXHIBITION HALL ARE ALREADY BOOKED TO FIRMS OF THE HIGHEST STANDING.** Plan, showing spaces still available, will be sent on request.

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**PROVINCIAL EXHIBITIONS LTD.,**  
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# Dainty Advertisements

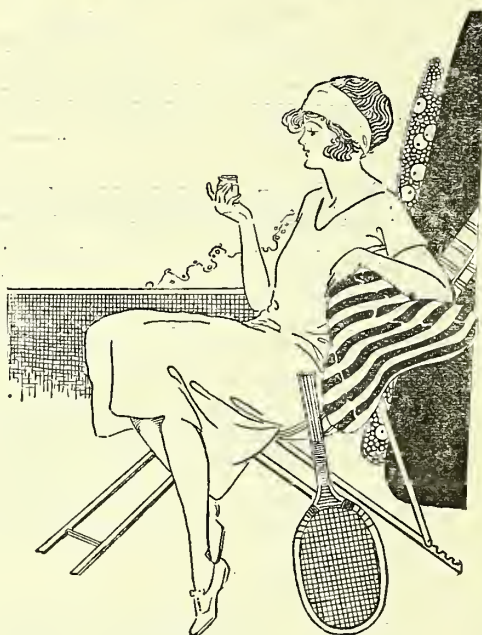
## Charm My Lady's Purse Strings

Dainty and attractive advertisements of Toilet Goods have a special influence on a pharmacist's customers.

Instinctively customers realise that the daintiness, refinement, and attractiveness of the advertisements reflect the excellence of the article itself.

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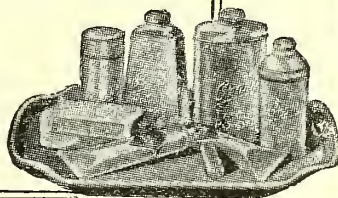
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GOLDEN  
SERIES

*The Regalia of the Toilet*

THE casual customer  
in search of P e a r s'  
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to come again when he  
finds that you can satisfy  
his needs. It is that second  
visit which counts in  
extending your connection  
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# JAYTEE'S Finest Quality PURE OLIVE OIL (Huile d'Olive de Provence)

**SPECIALLY PREPARED FOR  
SALADS AND MEDICINAL USE**

At 8/6, 14/-, & 23/- per doz. In Reputed Quarter, Half, and Pint Bottles.

PROPRIETORS—

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LIVERPOOL.**



# Trade follows the Ad.

The absolute necessity for increasing British trade—Home and Export—is daily being emphasised by statesmen, business men and bankers.

Travelling and postal costs are now so prohibitive that advertising in a reputable trade journal, with a genuine appeal to actual buyers, like

## THE CHEMIST AND DRUGGIST

is the most effective and least expensive way of selling goods.

In the case of THE CHEMIST AND DRUGGIST the appeal is universal. Besides having as regular subscribers all the worth-while firms—manufacturing, wholesale, export and retail—in the United Kingdom, the subscription list includes the names of thousands of responsible firms buying and selling drugs, chemicals, perfumery, druggists' sundries, and allied products in the following countries overseas:

<b>BRITISH EMPIRE</b> Australia British Columbia British Guiana British West Indies Burma Canada Ceylon Cyprus Fiji Islands Gibraltar Gold Coast Hong Kong India Jamaica Kenya Colony Malay States Malta Newfoundland New Zealand	Nigeria North Borneo Rhodesia St. Helena Sierra Leone South Africa Trinidad Uganda Zanzibar <b>EUROPEAN CONTINENT</b> Austria Belgium Bulgaria Czechoslovakia Denmark Estonia Finland France Germany Greece	Holland Hungary Italy Latvia Norway Poland Portugal Roumania Serbia Sicily Spain Sweden Switzerland Turkey Yugo-Slavia <b>CENTRAL AMERICA &amp; SOUTH AMERICA</b> Argentine Bolivia Brazil	Chile Colombia Costa Rica Cuba Ecuador Guatemala Haiti Panama Peru Salvador Uruguay Venezuela <b>AFRICA</b> Algeria Canary Islands Congo (Belge) Egypt Morocco South-West Africa Protectorate Sudan	<b>NEAR EAST &amp; FAR EAST</b> Arabia Asia Minor China Japan Java Manchuria Mesopotamia Palestine Philippine Islands Siam Syria <b>UNITED STATES OF AMERICA</b> <b>MEXICO</b>
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Thus wherever the British Flag goes there also is THE CHEMIST AND DRUGGIST, and the point to bear in mind is

that it is sent regularly at the request of eager buyers of Drug-trade commodities who prepay 20/- to have it delivered to them weekly for twelve months.

The Firm with Drug-trade merchandise to dispose of, therefore, which is not advertising in THE CHEMIST AND DRUGGIST is losing golden opportunities.

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**THE PUBLISHER, THE CHEMIST & DRUGGIST,**  
 42 CANNON STREET - - - LONDON, E.C.4.

*Branch Offices:*  
 MANCHESTER (ENGLAND);  
 and SYDNEY & MELBOURNE,  
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# A Copy Free

on receipt of your card.

## Our New Price List of **Organotherapeutic Preparations**

is ready for distribution.

It not only contains valuable Text on the various glands, but a complete revision of Prices and Discounts.

Our supply is limited, but we wish every Pharmacist to possess one.

**Write for a copy  
to-day**

if you have not already  
received one.

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Corrosive Sublimate. Thymol.

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*R. W. Greeff & Co. Ltd.*

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**ABSOLUTELY PURE and ABSOLUTELY WHITE.**

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Supplied also in 4-oz., 2-oz., & 1-oz. rounds.

Celebrated for excellence and purity for upwards of three-quarters of a century.

**FARRIS'S SPECIALLY REFINED PURE SPERMACETI,**  
 Refined **MONTAN WAX** (the old-fashioned kind). **STEARIC ACID, CERASINÉ**

**ALSO WAXES & OILS OF EVERY KNOWN KIND & FOR EVERY PURPOSE.**

*The only actual Manufacturing Wax Chandler in the City of London*

### CHARLES FARRIS

Helmet Court, Wormwood Street, Bishopsgate, London, E.C. 2.  
 (Entrance also between 77 & 79 BISHOPSGATE.)

## Stirring up Trade

WHEN business, like individuals, gets depressed, run-down and sluggish, there is no surer pick-me-up than Glycola Health Salts. During the warmer weather, particularly, there is always an increased demand for cool, refreshing health drinks—but make sure you handle the BEST only. Glycola Salts carry excellent profit—and sell well.

### GREAT DISPLAY OFFER !

**FREE.** With all display orders for Glycola and Glycola Health Salts we are offering absolutely FREE—

1 doz. Shampoo Powders with each	1 doz. 1/4 Glycola.
1 doz. " " "	2 doz. 8d. "
1 doz. " " "	1 doz. 10d. Health Salts.

# GLYCOLA

## Health Salts

Here's a chance to make big profit. Don't miss it.  
 Order through your P.A.T.A. Wholesaler at once.





# Maw's Page



## “MERITOR”

### SPELLS SATISFACTION FOR YOU.

Complete satisfaction is the reward of the chemist who pushes “Meritor” Brushware.

First, there is the satisfaction which comes from the knowledge that you are selling an article of absolutely reliable quality, produced by a House of established reputation and supplied with a firm guarantee.

Second, there is the satisfaction of having at your disposal a complete range of goods which suit exactly the tastes of the general public, the feeling that whatever toilet brushware your customer may ask for, you can meet his wishes with a “Meritor” Brush.

Third, there is the satisfaction of handling brushware presented in a manner at once convenient, hygienic and attractive, also the further pleasure of having equally attractive advertising material to assist you in displaying the goods.

Last, and most important, there is the lasting satisfaction which is the result of securing a reasonable profit on every sale and at the same time realising that you have added a stone to the fortress which protects the chemist brushware business from outside competition.

*“Meritor” Brushware is the chemists’ copyright.  
Every “Meritor” sales means profit for a qualified pharmacist.*



**S. Maw, Son & Sons. Ltd.**  
Aldersgate St., London.  
and Barnet.

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Private  
Branch  
Exchange

Telegrams :  
**Eleven  
Cent  
London**

Cables :  
**Eleven  
London**

Code :  
**A.B.C.  
4th & 5th  
Edition**





THE SUMMER TIME ACT  
has considerably increased outdoor exercises, sports, etc.,  
and every sports enthusiast is a prospective customer for

“KETOX”

THE  
NEW DISCOVERY  
FOR

MAKING YOUR CUSTOMERS IMMUNE from all INSECT BITES.

“KETOX” is a scientific and unique combination of insecticidal and aromatic substances in an agreeable form calculated to repel the irritating attacks of all midges, gnats and biting pests, including the insidious “Harvest Bug.”

***PREVENTION is better than Cure.***

“KETOX” is attractively packed in actinic green watch-shape bottles (1 ounce)  
HANDY FOR POCKET—SACHEL—POUCHETTE

10/- per doz., 108/- per gross. Showcards, etc., supplied.

MANUFACTURED ONLY BY  
**SOUTHALL BROS. & BARCLAY, LTD.**  
**BIRMINGHAM.**



*Abridged List*

"Elco"	P.A.T.A. W <sup>sale</sup> Retail
*Aspirin Tablets (25's)	3/9 - 7½
" (100's)	9/- 1/6
Bay Rum and Can- tharidine Hair Wash (4 oz.)	14/- 2/-
*Beauty Cream (2¼ oz.)	14/- 2/-
Boroformic Soap (bxes. of three tabs.)	19/6 2/6 (10d. per tab.)
Borated Dusting Powder	9/6 1/3
*Brilliantine (Solidified)	8/6 1/3
*Carlsbad Powder (4oz.)	13/6 1/9
* Display Outers supplied with these	

TERMS NET MONTHLY:  
£5 ORDER—5% DISCOUNT  
and Complete Window Display

## ELEGANCE

IF you profess a special appreciation of the beautiful, and endeavour to carry your ideas into practice—in other words, if you are an æsthete—you will appreciate the distinctive elegance of the "Elco" Series.

An "Elco" Display in your window or on your counter is bound to re-act indirectly upon your business, in addition to bringing you in 80% net profit on your outlay on the goods themselves.

*May we send you  
a £5 trial order?*

*Abridged List—cont.*

"Elco"	P.A.T.A. W <sup>sale</sup> Retail
*Carlsbad Powder (8oz.)	20/- 3/-
*Dental Foam	9/- 1/3
*Foot Tabs (23's)	4/6 - 10
*Headache & Neuralgia Tabs (16's)	6/6 1/-
*Saline (6 oz.)	13/6 1/9
*Shampoo Powder (7's)	14/- 1/9
" (Loose)	18/- gr.-/3 ca.
*Syrup of Figs (2½ oz.)	9/6 1/3
*Vanishing Cream (2 oz.)	13/- 1/9
*Witch Hazel Foam (2¼ oz.)	11/- 1/6
* Display Outers supplied with these	

SHOWCARDS and WINDOW  
TRANSPARENCIES  
Supplied Free

# EVANS

EVANS SONS LESCHER & WEBB, LTD.  
LIVERPOOL New York LONDON



# One of the most SUCCESSFUL LINES we have ever introduced

Drop us a Post Card, and we'll tell you  
all about it.

**SUTTLEY & SILVERLOCK**

World's Label Printers

LTD.

BLACKFRIARS ROAD, LONDON, S.E.1

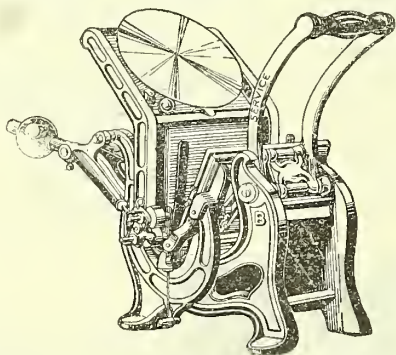
ANOTHER GOOD LINE

## Chemists' White Demy

10 Reams, 60/- Carriage Paid

### LABELS IN SMALL QUANTITIES.

Print your own and save money. This can  
be done in your own Office with a  
"SERVICE" machine at minimum cost.  
You need no technical knowledge.



The Price is only £10 10 0 and the machine  
needs no upkeep.

**PRINTERS' SUPPLY SERVICE Ltd.**  
57 Farringdon Street, London, E.C. 4.

Phone: City 2489.

ESTABLISHED 1839.

### PROTECTIVE OVERALL CLOTHING FOR CHEMISTS & DRUGGISTS

**KHAKI DRILL  
WAREHOUSE COATS,**

7/11, 10/6, 12/6, 14/6.

**WHITE DRILL JACKETS,**  
6/6, 7/6, 10/6.

**WHITE DRILL LABORATORY COATS,**  
10/6, 12/11, 15/11.

**BLACK DRILL WAREHOUSE COATS,**  
18/6.

Postage on Coats 9d. each.



**POST ORDERS Promptly and Carefully Executed.**

We pay postage on all orders over 20/-.  
Samples and special quotations for quantities  
sent on request.

STOCK SIZES, 34 to 44 Chest. When  
writing us measure Chest over waistcoat.

**GARDINER & Co. (THE SCOTCH  
HOUSE) Ltd.**

(Dept. T.)

1 COMMERCIAL ROAD, LONDON, E. 1.

Phone: Ave. 6650 (4 Lines.)

Wires: "Durastile, Phone, London."

ESTABLISHED 1839.

Write us for Copy of New Illustrated Style Booklet.



# Ayrton's

## A GOOD TURNOUT MEANS A GOOD TURNOVER AND THAT'S WHY YOU SHOULD DRESS YOUR GOODS IN **AYRTON'S OVALS**

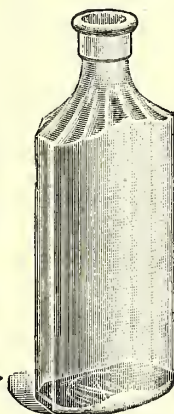
### CORRECT IN CORKAGE CAPACITY AND WEIGHT

Exceptionally strong due  
to superior glass dis-  
tribution and scientific  
annealing

A Pure White Flint Bottle of dis-  
tinctive design, specially made on  
Owen's Automatic Machine

### Prices for original crates :

1 oz.	6 oz.
<b>16/-</b>	<b>22/9</b>
—	—
2 oz.	8 oz.
<b>17/3</b>	<b>24/3</b>
—	—
3 oz.	10 oz.
<b>19/6</b>	<b>30/-</b>
—	—
4 oz.	12 oz.
<b>21/9</b>	<b>36/-</b>



**PACKING & CRATES  
FREE**—carriage paid to  
any Railway Station in  
England or Port in  
Ireland

1, 2, 3 & 4 oz. in 6-gross crates  
6 & 8 oz. „ 3 „ „  
10 & 12 oz „ 2½ „ „

For smaller or assorted lots  
write us for quotation

WRITE TO US ON THE GLASS BOTTLE QUESTION

WE ARE IN AN UNIQUE POSITION TO QUOTE YOU FOR  
MEDICAL FLATS, PANELS, LIMES, KALIS, VIALS, POISONS & TABLET BOTTLES

### Special Quotations for Export

## AYRTON, SAUNDERS & Co., LTD.

Manufacturing Chemists

34 Hanover St., LIVERPOOL, Eng.

Telegrams : "SUNDRIES LIVERPOOL"

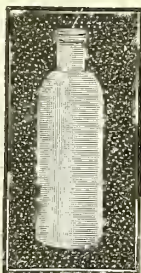
Telephone : ROYAL 4861

# THE GLASSWARE HOUSE FOR YOU

is the one that holds spot stocks of nearly all trade requisites, and we are in the position to do so. Whether in London, or in the Provinces, we can dispatch promptly. Send us your enquiries and let us quote.



KALI



LIME

Bottles,  
Jars,  
Chemical  
and  
Laboratory  
Glassware  
in immense  
variety.



Narrow-mouth SHOP ROUND



MEDICAL

Wholesale  
ONLY

## JULES LANG & SON

No RETAIL  
Firms supplied.

Charlton Works - Charlton Place - Islington - LONDON, N.1.  
(Opposite Agricultural Hall)

Telephones: North 2770-2 (3 lines).  
Telegrams: "ASSORTED, PHONE, LONDON."

Codes: ABC, 5th Edition. Scott's 10th Edition (1906).  
Bentley's Complete Phrase Code.

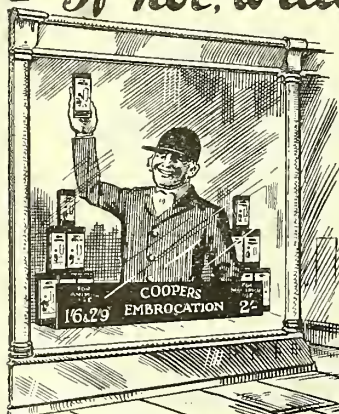
WHEN ENQUIRING, PLEASE MENTION THIS PAPER.

## COOPER'S EMBROCATION

*John Peel Brand*

HAVE you yet written for full particulars of our liberal Trade terms and bonus scheme?

*If not, write to-day*



THIS attractive sales compelling Window display, supplied free.

COOPER'S EMBROCATION ("John Peel" Brand) is put up in three sizes:

For Household use :  
2/-

For Animal use  
1/6 & 2/9

William Cooper & Nephews Ltd.,  
(Manufacturers of the World-famous Sheep Dips),  
BERKHAMSTED, HERTS.

## BOTTLE WASHING MACHINES

To suit every description of Bottle.

### DAWSON BROS., LTD.

THE WORLD-RENOWNED  
BOTTLE-WASHING MACHINE MAKERS,

VENTNOR WORKS,  
GOMERSAL, NR. LEEDS.

WRITE FOR COMPLETE CATALOGUE.





**The standard one-gross package for 1½d. Castols** is a richly coloured canister of great strength and attractiveness, which, having served its turn as a Sales-compelling Display Package, is useful for storage purposes. As for the Castols themselves, fourteen years of growing popularity is sufficient proof of their merits.

Castols are sold in 1½d. packets and 9d. & 1/6 tins. Trade prices 12/- gross & 6/6 & 13/- doz. respectively. The 9d. and 1/6 Tins are in the P.A.T.A. Owing to its high cost the above Canister cannot be supplied with less than one gross of Castols.

**THOMAS KERFOOT & CO LTD**  
**BARDSLEY VALE, LANCASHIRE,**  
 & Bardsley House, London, N.1  
 ESTABLISHED 1797.



# DEVON VIOLETS      DEVON LILIES DEVON LAVENDER

Pharmacists would do well, before placing orders elsewhere, to investigate the selling powers of these very attractive perfumery products.

We should like to draw attention to the following letter which we have received from one of our Customers :

**STEELE and MARSH,**  
*Manufacturing and Dispensing Chemists,*  
6 MILSOM STREET, BATH.

MESSRS. W. J. BUSH & CO.  
Ash Grove, Hackney, London.

1st June, 1922

Gentlemen,

You will, I am sure, be very pleased to hear that the window containing Devon Violets, Devon Lilies and Lavender Water took the first prize this week in the Bath Spa Attractions Week Competition, open to all trades.

We arranged the window in a colour scheme, and made good use of the excellent show cards you sent, in addition to which we used some large Wicker Bottles which we had in stock. An interesting fact is, that we only spent a total of 11/- in connection with the display, as we decided not to use drapings.

The Judges awarded us 23 out of 25 points for "capacity to sell", 23 out of 25 points for "general attractiveness", 15 points out of 20 for "originality", 15 points out of 20 for "economy and simplicity", and 9 points out of 10 for "workmanship".

The window is proving a good seller, and has aroused a good deal of interest owing to the excellent taste displayed....

A gentleman who called in yesterday, who has been connected with the Drug trade for many years, stated that he considered it was one of the finest Chemists' windows he had ever seen in England....

Thanking you for the assistance you have rendered with the show cards,

We remain, Yours faithfully,  
(signed) DAVID A. EVANS.

.....  
***Beware of Imitations!***  
.....

**W. J. BUSH & CO., LTD.,** Ash Grove, Hackney, London, E. 8

*Proprietors of*  
**POTTER & MOORE,** Mitcham.

**BUISSON FRÈRES,** London.

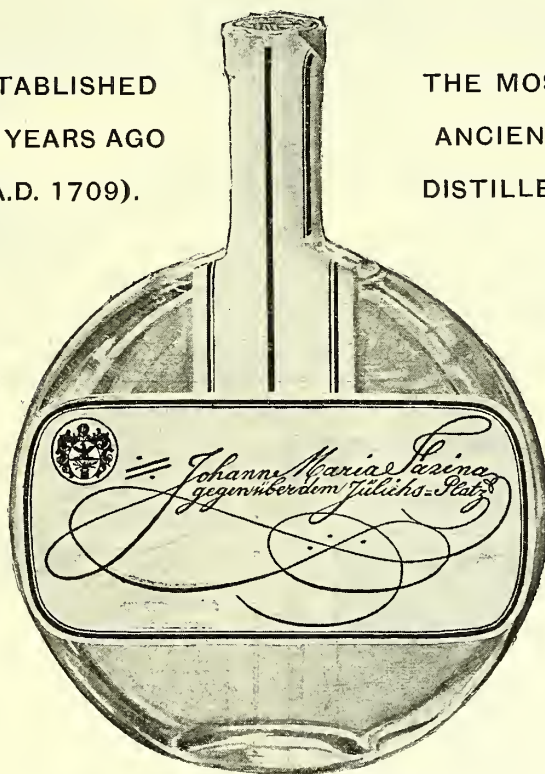


# "THE GENUINE" EAU DE COLOGNE

OF  
JOHANN MARIA FARINA,  
GEGENÜBER DEM JULICHS-PLATZ  
COLOGNE

ESTABLISHED  
212 YEARS AGO  
(A.D. 1709).

THE MOST  
ANCIENT  
DISTILLER.



New Watch Shape Bottle  
2 oz.

35/9 per dozen, less discount.

BETTER PROFITS THAN ANY OTHER BRAND.

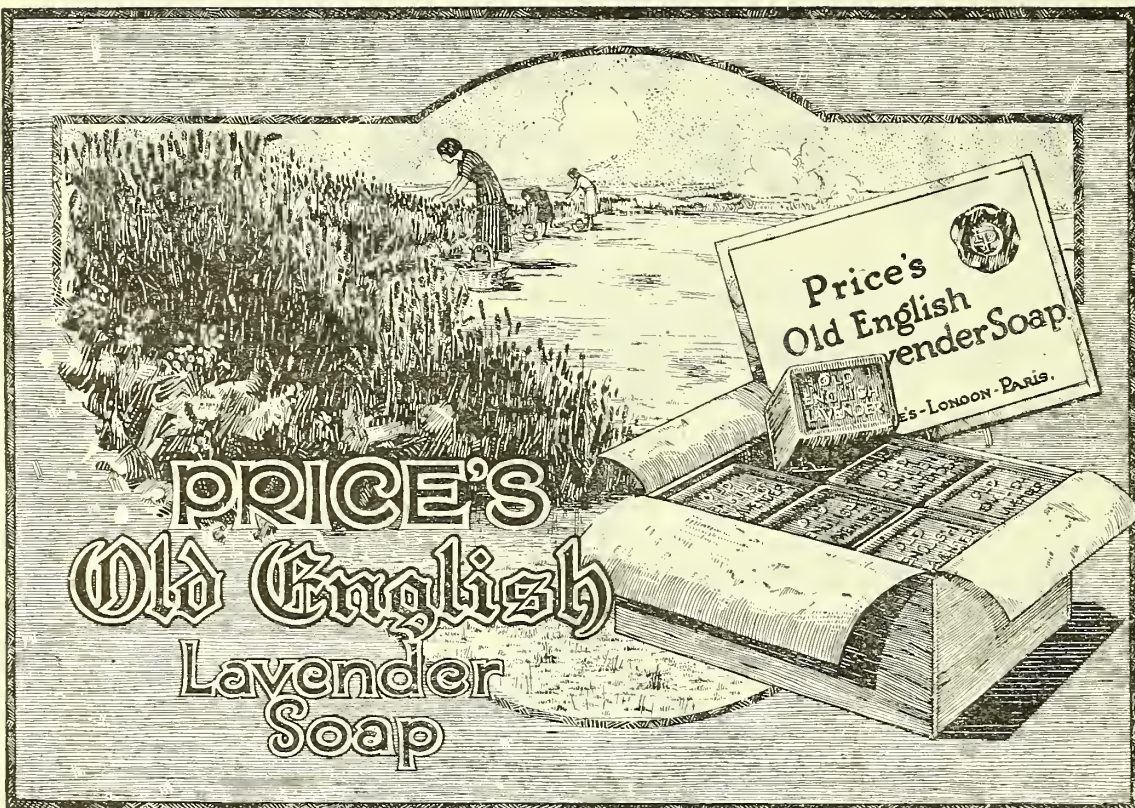
## PRICES :

	Per Doz.		Per Doz.
No. 0—Watch Flasks (2 oz.)...	35/9	No. 4—Small Wicker Bottles (6 oz.)...	103/9
No. 1—Short White Bottles (2 oz.)...	35/9	No. 5—Medium „ „ (12 oz.)...	206/6
No. 2— „ „ „ (4 oz.)...	69/-	No. 6—Large „ „ (24 oz.)...	413/-
No. 3—Double White „ (8 oz.)...	136/-		

CARRIAGE PAID

**BLACKALLER & PLEASANCE**  
8 LAURENCE POUNTNEY HILL : : LONDON, E.C.4.





**PRICE'S**  
**Old English**  
**Lavender**  
**Soap**

Price's  
Old English  
Lavender Soap.  
LONDON - PARIS.

**"A Line That Sells Itself."**



Finest Quality Concentrated Perfumes  
made from natural flower oils in the  
following odours:—

PARMA VIOLET	WHITE LILAC
LILY OF THE VALLEY	WHITE ROSE &
WALLFLOWER	SWEET PEA

Free from spirit. Supplied in High  
Class Rod-Stoppered Hexagon Bottles.

Apply to—

**RUVOIRE ET C<sup>IE</sup>,**  
154 Church Lane, Harpurhey, MANCHESTER.



**DEAN'S RAG**

**"SWIMEESY" BUOYS**

are a reliable swimming device that will bring you EXTRA SALES during the SUMMER MONTHS in all districts possessing bathing facilities. No awkward sizes to stock—no changing fashions to study. Stock occupies little space and does not deteriorate. No waste.—No packing costs. MADE IN TWO STYLES—Plain tints (assorted). Butterfly Wing (full colours).

Send your Trade Card for particulars.

**DEAN'S RAG BOOK CO., Ltd.,** Elephant & Castle, London, S.E. 1.

## POWDER PUFFS

Our creations in this line are acknowledged to be UNIQUE, and wherever shown they appeal to the lady of refinement because of their ORIGINALITY of design. Our Novelties are packed singly in round fancy boxes and bear our gold seal "ROSETTE" with device of basket of roses, which stands for Quality and High-class Workmanship. One dozen boxes are packed to the carton, which packing is most convenient for Shipping. Manufactured throughout by BRITISH LABOUR in our own workshops under ideal conditions, our Powder Puffs are demanded practically the WORLD OVER. Markets still open include The EAST, The UNITED STATES OF AMERICA and SOUTH AMERICAN STATES. We kindly invite enquiries from Merchant Shippers catering for these countries confident that there need only be a few of our novelty puffs shown to create a large demand.

**J. R. BOURLAT, GOES & CO.,**

Manufacturing Specialists in Fancy Powder Puffs to the Wholesale and Shipping Trade ONLY.

22 Princes Road, Holland Park, LONDON, W. 11.  
Telephone Nos.: PARK 240 & 2592.



# Building Sales for You

ADVERTISEMENTS like the one shown on this page are being read by women everywhere in Great Britain. They are appearing regularly in "The Daily Mail," "The Daily Mirror," and in women's periodicals like "Vogue," "Eve," "The Ladies' Field," "Tatler," "Sketch" and "Queen."

These are the sales-builders that are working for you to bring women to your counter to ask for Ingram's Milkweed Cream.

Ingram's Milkweed Cream is world-famous. It has a larger sale than any similar preparation in the world. Its tonic quality makes it unique, for it actually "tones up"—revitalizes—the complexion as well as protects the skin.




*A Rose-petal skin*

Constance Talmadge is one of the many stars of the stage and screen who use and endorse Ingram's Milkweed Cream. Read carefully the booklet "The Care of the Complexion," that is packed with every jar.

YOUR complexion is tired at night. All day long it has been exposed to the ravages of wind and weather, the dust of the streets and the heat of the sun.

Apply a little Ingram's Milkweed Cream before going to bed. It will bring back that rose-petal softness and radiant clearness. The wonderful therapeutic qualities of Milkweed Cream actually revitalize the skin tissues. You can get it at your chemist's. If you experience any difficulty in obtaining it write "Sangers," 258, Euston Road, N.W. Wholesale Distributors.

**Ingram's  
Milkweed  
Cream**



Ingram's Milkweed Cream is protected on the list of the P.A.T.A. at the following prices:

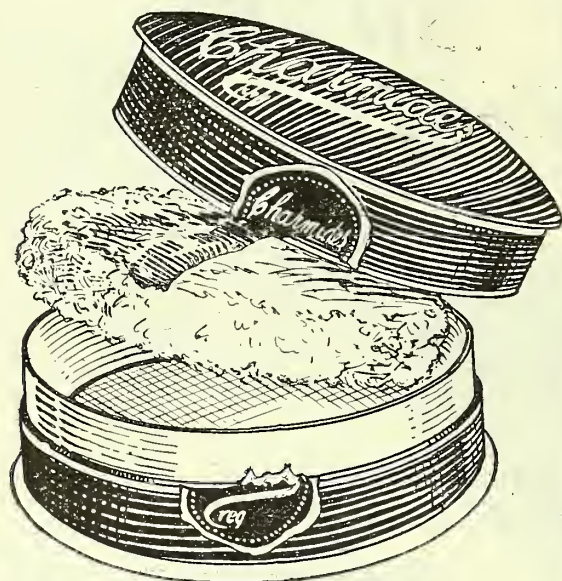
Minimum retail, 2/6 .. 22/6 per dozen.

5/- .. 45/-

The representatives for Great Britain are:  
SANGERS, 258 Euston Road, N.W.1.

# Ingram's Milkweed Cream

"SO DIFFERENT FROM THE ORDINARY."



ESTABLISHED  
1890

*Charmides*  
**TOILET  
SPECIALITIES**

Exclusive and Exquisite.

The Dainty New Box of Charmides Face Powder,  
with "economiser" and handy little puff (actual size)

RETAIL PRICE 1/6 (1 oz.)  
Wholesale 12/- dozen.

GENEROUS TERMS—MORE THAN  
33 $\frac{1}{3}$ % off RETAIL. QUICK SELLER

Obtainable from

Barclay & Sons, Ltd., Butler & Crispe, Ltd., Osborne,  
Garrett & Co., Ltd., Sangers, and usual wholesalers.

**"MRS." NEVILLE ROSS**  
(of Chelsea) Established 1890.

(Managing Proprietor, EDWARD HYDE),

12 Mandeville Place, LONDON, W.1.

**"Newberys"**  
FRANCIS NEWBERRY & SONS LTD.

### COMPLETE RANGE OF

Packed Pharmaceuticals,  
Toilet Preparations,  
"Own Name" Packed Goods.

### SUNDRIES—

Best British Tooth Brushes,  
Hair Brushes, and Shaving  
Brushes. Mirrors,  
Manicure Requisites, etc.

**FRANCIS NEWBERRY  
& Sons, Ltd.  
LONDON & CARDIFF.**

## Pyramid Policy

THE making of fine Corks is not a secret process—although there are wrinkles. And experience makes a difference! There is one thing that *does* count. It is this.

## PYRAMID CORKS

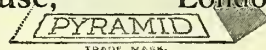
are better corks because of the Pyramid Policy. We could make cheaper corks and get the same price—but it's not honest. And honesty is the Pyramid Policy. 100% value for money—nothing less—that is what has built this business.

Write for Pyramid Prices and Samples to-day.

**N. W. Mitchell & Sons, Ltd.,**

"The Cork Firm."

**Limehouse, London, E. 14.**





# Cellophane

## What Is It?

### CELLOPHANE

is a **transparent** film of pure Cellulose, **absolutely** air, grease, and odour proof, **unaffected** by cold, heat or moisture, and **sterilisable**.

An **ideal wrapping** for Drugs, Tablets, Bath Crystals, Perfumery, Provisions, Sweets, Surgical Dressings, Articles of Toilet, Sponges, etc. etc.

Will keep your Goods, Boxes, Bottles, and delicate Labels **clean** on the Counter and in Shop Windows, allowing the Articles to be seen **by transparency**. Can be had colourless, coloured and embossed.

Also in the shape of **Labels** for Bottles, and **Discs** for Creams, Ointments, Boot Polish, &c.

**Cellophane Envelopes**, printed or not.

**Agents Wanted where not represented.**

*Prices, Samples and Particulars from*

**The CELLOPHANE COMPANY**

(GUSTAVE LECLERCO),

7, 8 & 9 Bird Street, LONDON, W. 1.



## Have You Seen the DE LUZY Stand at Olympia?

During July we are concentrating much of our attention on stimulating the DE LUZY trade for London Chemists.

Our usual advertising in the "Daily Mail" and in the great feminine dailies, the "Daily Sketch" and "Daily Mirror," continues to feature our exquisite French spécialités—DE LUZY Powder, Cream, Talcum, Eau de Cologne, and Perfumes. During July we have added the "Evening News" to our popular advertising media.

We have also taken—and are now running—an important stand at Olympia at the carefully organized

**"DAILY EXPRESS"  
WOMAN'S EXHIBITION  
JULY 12th - JULY 29th**

Our experience of DE LUZY proves that any of the attractively boxed spécialités have only to be displayed to be bought—to be tried once, to be used always.

We are giving all possible publicity to DE LUZY from our end of the business—you can gain wide sales and liberal profits by giving publicity to DE LUZY from yours.

*De Luzy*  
Crème, Poudre  
et Parfums  
Paris

General Manager: W. H. CALNAN  
3 LONDON WALL AVENUE, E.C.2.

Telephone: WALL 9966.

# A. Ruch & Co

ESTABLISHED 1830.



G. GRANT FORSYTH.  
R. BRUCE FORSYTH.  
W. FRASER FORSYTH.



## GLASS BOTTLES

of every description.

ENQUIRIES INVITED

28 Martin Lane, Cannon St., London, E.C. 4.

Telegrams: "Sennock, Cannon, London." Phone: Central 4799.



# DEARBORN L<sup>TD</sup>

37 Gray's Inn Road,  
LONDON, W.C.1.

## Toilet Specialties.

	Price per doz.	Selling Price to Retailer P.A.T.A.
PILENTA SOAP ... A complexion soap.	10/-	1/-
PROLACTUM ... For the lips.	10/-	1/-
PARSIDUM JELLY ... For wrinkles.	10/-	1/-
ALLACITE OF ORANGE BLOSSOM ... A dressing cream.	22/6	2/6
BORANIUM ... A hair tonic.	22/6	2/6
CLEMINITE ... For a face lotion.	22/6	2/6
COLLIANDUM ... For a face tint.	22/6	2/6
PERGOL ... A deodorant.	22/6	2/6
TEKKO PASTE ... Camphor cream.	22/6	2/6
STALLAX ... For a shampoo.	22/6	2/6
JETTALINE ... For clearing the skin.	31/6	3/6
PHEMINOL ... A depilatory.	36/-	4/-
MENNALINE ... For the eyelashes.	36/-	4/-
MERCOLIZED WAX ... A face cream.	31/6	3/6
STYMOL ... For oily complexions and blackheads.	36/-	4/-
SILMERINE ... Hair-curling fluid.	22/6	2/6
BARSYDE ... Dandruff eradicator.	22/6	2/6
TAMMALITE ... For grey and faded hair.	22/6	2/6
LIQUID PERGOL ... To check excessive perspiration locally.	31/6	3/6
BICROLIUM ... For whitening the hands.	22/6	2/6
HARAPOSA ... Nut oil shampoo.	22/6	2/6
COCONOIDS ... For figure development.	31/6	3/6

### The Products of

Messrs. PARKER, BELMONT & CO.

CLYNOL BERRIES	36/-	4/-
For obesity.	58/6	6/6
SOFT PALERIUM...	45/-	5/-
For wrinkles.		
LIQUID NAIL POLISH ...	10/-	1/-
Brilliant and lasting.		

Stocked by ALL Wholesale Houses.

### COLONIAL DEPOTS AND AGENCIES.

Australia: ALL WHOLESALERS, & DEARBORN (Australia),  
Ltd. Grace House, Clarence Street, Sydney.

South Africa: LENNON Ltd. Cape Town, etc.  
SIVE BROS. & KARNOVSKY, Johannesburg.

India: FRAMJEE & SON, Bombay.  
SMITH, STANISTREET & CO., Calcutta.

New Zealand: SHARLAND & CO., Auckland & Wellington.

South America: DEARBORN (South America), Ltd., Calla  
Salta 264, Buenos Aires.

## LINE THAT SHOW GOOD PROFITS



### Taylor's CIMOLITE PREPARATIONS

50 YEARS' REPUTATION.

Used in all Royal Nurseries and by the Nobility.

#### CIMOLITE TOILET POWDER.

Boxes, 1/12 (per doz. 9/6)  
Tins, 3/-, 5/6, 11/- (per doz.  
27/-, 49/3, 96/-)

Bottles, 3/3, 6/6 (per doz.  
30/-, 55/6)

#### CIMOLITE TOILET CREAM.

Collapsible tubes, 1/3 (per  
doz. 11/6)

#### CIMOLITE SOAP.

Per tablet, 8d.; per box 2/-  
(per doz. 3 tab. boxes, 20/-)

#### CIMOLITE FACE POWDER.

Boxes, 1/12 (per doz. 9/6)

Tins, 3/- (per doz. 27/-)

Bottles, 3/3 (per doz. 30/-)

#### CIMOLITE SOAP (Violet-Scented)

Per tablet, 8d.; per box 2/-  
(per doz. 3-tab. boxes, 20/-)

#### CIMOLITE SHAVING SOAP.

Sticks, 1/3 (per doz., 11/6)

SHOWCARDS and Counter  
Bills on application.

NOW  
ON  
THE  
P.A.T.A.



Cimolite Prepara-  
tions are stocked  
by all wholesale  
houses.

ATTRACTIVE SHOW CARD obtainable from  
all wholesalers or direct.

PREPARED ONLY BY

JOHN TAYLOR, Manufacturing Chemist  
30 BAKER STREET, PORTMAN SQ., LONDON, W.1

## "Jackel's Cream"

(without Grease)  
for THE HAIR

Sold everywhere

Established 1883.



"Jackel's Cream"  
fixes the hair in any de-  
sired position; is un-  
excelled as a dressing  
and does not soil the  
headwear. It removes  
Scurf and Dandruff,  
keeps the scalp healthy,  
and promotes the natu-  
ral growth of the hair  
while maintaining its  
softness and brilliancy.

Prices for Wholesale and Export  
Houses on application.

Jackel et Cie (of Paris)

Ltd.,

Sauchiehall Street,  
GLASGOW.

CRYSTALLISED  
1/9 CREAM 2/6

Trade Mark attached to each  
bottle.





2388

NON-SEPARABLE.

1 oz. ...	4/9 doz.
2 „ ...	7/- „
3 „ ...	9/- „
4 „ ...	11/- „

SEPARABLE.

1 oz. ...	5/3 doz.
2 „ ...	8/- „
3 „ ...	10/6 „
4 „ ...	12/6 „

# TOOGOOD'S BRILLIANTINES

IN  
ASSORTED ODOURS.

SHOW CARDS  
and  
CUSTOMER'S NAME

free on 3 doz. of a style  
assorted sizes.



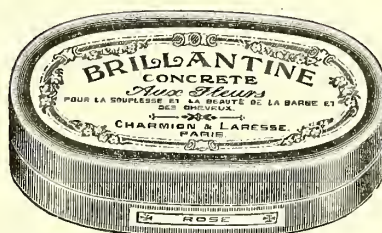
2963

NON-SEPARABLE.

3 oz. ... 9/- doz.

SEPARABLE.

3 oz. ... 10/6 doz.



3394

IN OVAL GREEN ENAMELLED  
TINS.

7/6 doz. 84/- gross.

*Write for full illustrated list and specimens of labels.*

Telephone:  
HOP 4170  
(2 lines).

**WILLIAM TOOGOOD LTD**  
**77, SOUTHWARK ST**  
**LONDON, S.E.1.**

Telegrams:  
"TOOGOOD,  
BOROH,  
LONDON."

# BATHING CAPS.

No.	Description	Sizes		
		1	2	3
No. 976.	<b>BATHING CAP</b> , circular shape, check sheeting bound, per doz.	6/6	8/6	10/6
"	" " " " check twill ... ..	8/-	10/-	12/6
"	" " " " fancy sateen ... ..	10/-	12/6	15/-
" 428	" " " " helmet shape, red rubber, linen band, 6 sizes ... ..	per doz.		
"	" " " " " extra stout " " " "	"	"	22/-
" 100.	" " " " SPECIAL LINE, similar to No. 428, but without pleats	"	"	13/6
" 100R.	" " " " " reversible " " " "	"	"	15/6
" 1746.	<b>DIVING CAP</b> , red rubber, with chin strap ... ..	"	"	20/-
" 1746A.	" " " " assorted colours, for ladies ... ..	"	"	20/-
" 1614.	<b>WATER POLO CAP</b> , standard shape and quality ... ..	"	"	30/-
"	<b>WATER WINGS</b> , full size, best quality, assorted colours ... ..	"	"	18/-
"	<b>SWIMMING COLLAR</b> , red rubber, each in stockinette cover ... ..	"	"	42/-
<b>PADDLERS</b> , with bib, check sheeting, small, per doz.	24/-	medium, 30/-	large, 36/-	
" without " (for boys) " " "	22/-	" " 28/-	" " 34/-	

# SPONGE BAGS.

No.	Description	Sizes					
		1	2	3	4	5	6
No. 978.	<b>SPONGE BAGS</b> —						
	Check sheeting, good quality ... per doz.	6/-	7/6	8/6	10/-	11/6	14/-
	super best ... ..	7/6	9/-	10/6	13/-	15/-	18/-
	The "Climax," proofed both sides ... ..	10/-	12/-	14/-	17/-	21/-	25/-
	Fancy proofings, assorted colours ... ..	11/6	13/-	15/-	18/-	22/-	27/-

A discount of 5 per cent. for prompt cash is allowed on all amounts of 10/- and upwards. Money returned if goods are not satisfactory. Write for Price Lists of Druggists' Sundries, Rubber Goods, cut Sheet Rubber Appliances, etc., containing full particulars of our well-known "Empire" brand of Air Cushions, Clinical Thermometers, Enemas, Hot Water Bottles, etc., etc.

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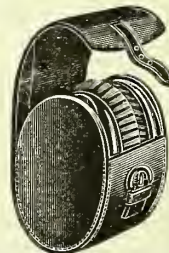
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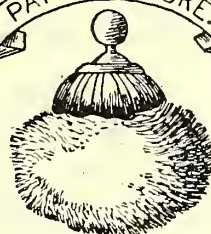
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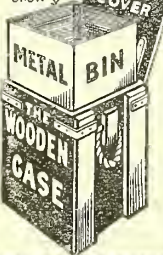
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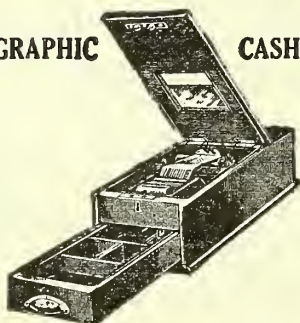
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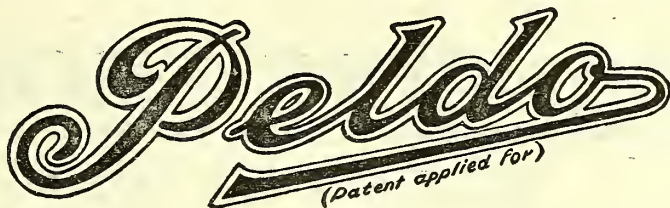


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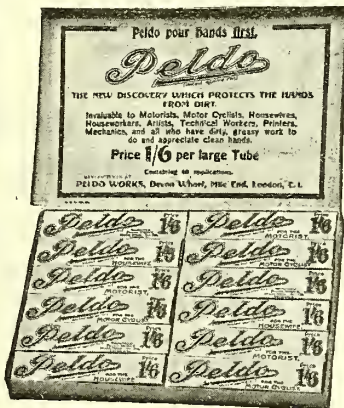
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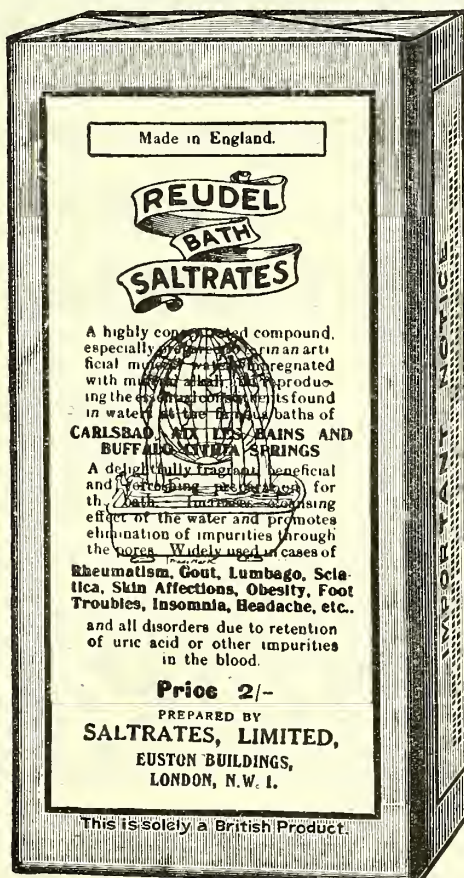
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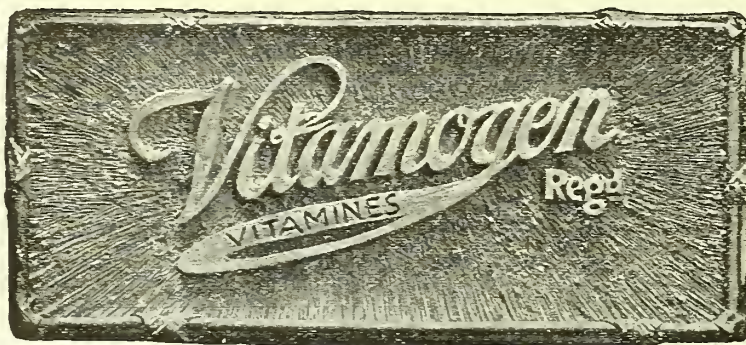
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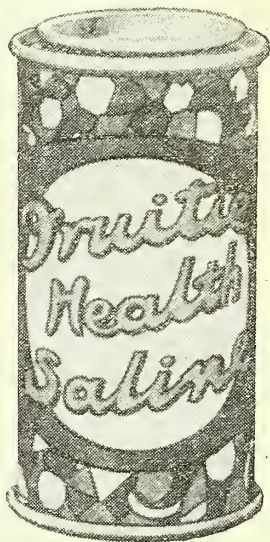
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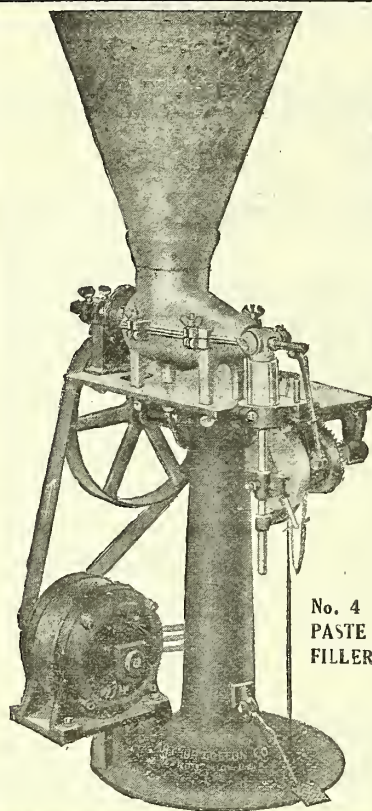
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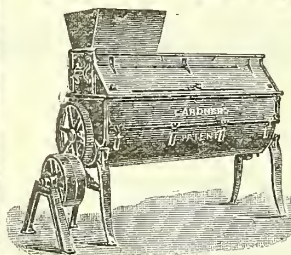
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**OVER 6,000**

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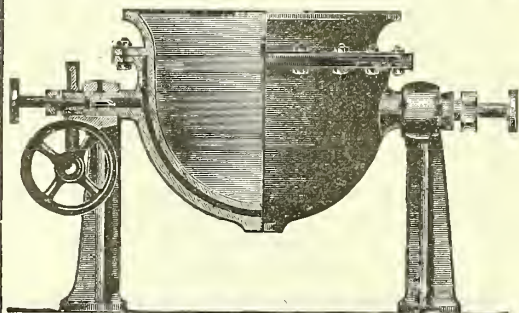
UPRIGHT CENTRE CASES, WALL CASES,  
GLASS COUNTERS, MIRRORS,  
WINDOW FITTINGS, GLASS SHELVES,  
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**NEW and SECOND-HAND.**

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Suitable for all Temperatures and Pressures

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You can be sure of  
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**The Best Service  
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**SUPPORT HOME  
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**SPECIFY ROBINSON'S**

## CHEPETTE BOXES

when ordering from your  
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✱

Both quality and appearance  
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Willow Boxes of German and  
Austrian make.

✱

Deliveries are prompt and  
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✱

Prices have been reduced and  
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CARDBOARD BOX MANUFACTURERS,

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*The Sign of  
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**C**LEAN bright negatives, crisp brilliant prints, rich deep velvety enlargements—these are the qualities which sell more photographic sundries—they are the qualities you always get when you send your Amateur Finishing Orders to us. Send a trial order now and criticise it! Remember a satisfied customer is your best advertisement—it is ours too!

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## A. MILLAR & CO., LTD., DUBLIN

(VINUM AURANTII B.P.)

Prepared in strict accordance with the Formula of the British Pharmacopœia.

(Wholesale only.)

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Spools developed, perfectly printed, and posted back same day. Enlargements three days. Send trade card for descriptive pamphlet and price list, mentioning "Chemist & Druggist."



How to give a  
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### D. & P. SERVICE

for 200 films and 1000 prints daily

**ON A  
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**CAPITAL OF £20**

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*Restricted to one dealer in each district.*

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For the LIVE KODAK DEALER.  
Same Day Return—Finest Results.  
PRICES RIGHT—PROFITS RIGHT.  
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Change Alley - SHEFFIELD

### DEVELOPING & PRINTING CHEAPEST & BEST. 24 HOURS' SERVICE.

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All sizes up to—	All sizes up to—
$\frac{1}{2}$ -plate, 6 or 8 exposures, 4d.	$3\frac{1}{2} \times 3\frac{1}{2}$ 1/2 per doz.
Postcard and $5 \times 4$ ... 5d.	$4\frac{1}{2} \times 2\frac{1}{2}$ 1/5 ..
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12 exposures, 50 % extra	Postcard ... 1/11 ..

#### POSTCARD ENLARGEMENTS

1 dozen from the same negative—  
B. and W., per doz., 2/- Sepia, per doz., 3/-

**SHAWYER & CO., SWINDON, WILTS.**





"A PEEP INTO ARCADY"

Negative taken on a RAJAR "N.-S." PLATE (an Iso plate for use without a colour screen) in  $\frac{1}{2}$  secs., at F/16; print made on RAJAR "Soft" GASLIGHT PAPER Glossy surface.

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MEM.—The fastest roll-film made is RAJAR—320 H. & D. Fits all standard roll-film cameras.

Your inquiries are invited: full particulars and special terms for Chemists sent by return.

Details of these or other British Photographic Materials can be had from the Sales Department,

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When the Snap-shot Cameras come out for the season, and the big army of Amateur Photographers starts its picture-making campaign, you should be ready with films, plates and papers to meet the demand.

**RAJAR**  
GUARANTEED

### Photographic Materials

have been known to you, and to your customers, for many years; their high reputation for dependable quality and excellent results, backed by the guarantee, make them a safe line to stock.

AMALGAMATED  
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PHOTOGRAPHIC  
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Our Agents in Higher Openshaw  
—Griffiths & Hornby— write  
29/6/22:

"Kindly forward enclosed order  
for 'Rodine.' I wish to make

## A big Push

and window show of your profit-  
able and effective line."

It pays to push "Rodine."

Get terms from the Sole Maker,

**HARLEY,**

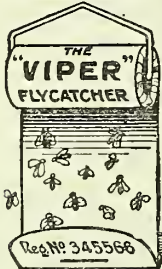
Manufacturing Chemist,  
PERTH, SCOTLAND.



THE  
**"FLYSAC"**  
Reg. Trade Mark  
Pat. No 20631-1929



THE  
**"VIPER"**  
Reg. Trade Mark  
Pat. No 566-1923



In  
three  
sizes:  
2 in.  
3 in.  
4 in.

# Best . . . and pay you best.

FLYSAC and VIPER Flycatchers please  
users and encourage the Flycatcher habit.  
They command better prices and carry  
better profit than low-grade kinds.

Write now for samples and New Season  
Prices.

From all Wholesalers and the Sole Makers,

**KAY BROTHERS Ltd., STOCKPORT.**

## Send us your Plates & Films. DEVELOPING & PRINTING

Prompt Delivery. Best Workmanship.

**Metropole Studios, The Hayes, Cardiff.**

## BOOKS FOR PHARMACISTS.

Send us a postal card and we will send you a 32  
page catalogue of professional and business books  
for pharmacists, and a copy of

### "THE SPATULA"

an illustrated monthly magazine for druggists, full  
of American snap and enterprise.

**THE SPATULA, BOSTON 14, MASS., U.S.A.**

## 'RATSTICKER' DESTROYS RATS QUICKLY

The non-poisonous varnish which causes natural death within a few  
minutes. Safe, certain, and continuous trap, recommended by  
Dr. Howarth, City of London Medical Officer.

Full instructions with each tin.

Per tin	Small for mice	1/4	Post
	Medium for rats	2/3	free.
	Extra Large for rats	3/3	

We offer 50% discount on initial orders  
from Chemists. Attractive Showcards free.

Manufactured by:

**B. WINSTONE & SONS, LTD. (Dept. N.),**  
100-101 Shoe Lane, London, E.C.4.



The original and oldest STICKY FLY CATCHER  
in the Market. 36 years' reputation.

The 'Fly Cemetery,' in Sheets.  
The 'Catch O' Paper, ditto  
The 'Cemetery' Fly Band, 3in.wide  
The 'Swallow' Fly Band, 1½in.wide

Prices on Application.

MANUFACTURERS—

**Tunbridge & Wright, Reading**

Telegraphic Address—"Flies Reading."

## THE Chemist and Druggist SUPPLEMENT

is an infallible help when you want  
to buy or sell a business, secure an  
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**SELL SURPLUS STOCKS.**

The Tariff is printed on the front cover of the Coloured  
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Address all inquiries to—

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Every Wise Farmer  
Uses



## RETAIL PRICES :

3/-, 7/-, 15/-, and  
23/- per tin.

Invoiced to the Trade  
at

2/9, 6/6, 14/6, and  
22/6 respectively,  
and subject to 20%  
discount.

Carriage paid on orders of  
40/- net. Postage charged on  
small lots.

**B. C. TIPPER & SON,**  
The Veterinary Chemical Works,  
**BIRMINGHAM.**





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A Most Effective and Attractive Proposition

**RETAILS AT 2/6**

*Liberal Quotations to the Trade*

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## CORRUGATED PAPER, BOXES & PACKINGS FOR ALL PURPOSES

*Waterproof Papers, Gummed Paper Tapes, etc. etc.*

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Telegrams:  
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**THE CORRUGATED PACKING MATERIALS CO., LTD.**  
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## Alcohol for Industrial Purposes

**Duty-Free Spirit.**

*The Industrial Spirit Supply Company, Limited.*

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**Disinfects  
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**Destroys  
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Home and Mansion,  
Specially prepared for use in the  
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Complete Outfits consisting of  
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Funnel and  
Size (a) container.  
**£1 1 0**



### Refills:—

Size (o) to make  
1 Gall. ... **6/9**  
Size (a) to make  
2 galls. ... **12/6**  
Size (b) to make  
3 Galls. ... **17/6**

Trial bottles to make 1 Quart ... **1/9.**

*Smart advertising matter and full particulars of Trade Discounts on application.*

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LTD.

Registered Offices: **97, QUEEN VICTORIA STREET, LONDON, E.C.4.**

Laboratories: **CAUSEWAY HOUSE, S.E.1.**

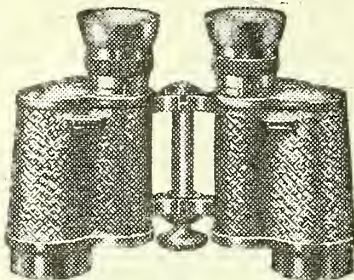
"TREATISE ON THE HOUSE-FLY."—A Scientific and interesting pamphlet just published, post free on application.



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Great War Stock purchase of Prismatic Binoculars, by well-known makers. We are offering these wonderful Bargains for a few weeks only at one-third of cost, and much below pre-war prices.



GOERZ 6×30 .. .. .	List price	£15	15	0
	Sale price	£6	10	0
ZEISSLAR Ocean Binocular 6×38 & 8×38	List price	£16	16	0
	Sale price	£6	10	0
ZEISSLAR Binocular 6×24	List price	£12	12	0
	Sale price	£3	15	0
DERAISME PARIS 8×24 .. .. .	£4	5	0	
DERAISME PARIS 12×24 .. .. .	£5	5	0	

All the above are fitted with separate screw and eyepiece focus and bending bar, in leather case and sling complete. They are all new, perfect and fully guaranteed. Call at our Showrooms and see the wonderful bargains offered, or if impossible to call we will forward on 7 days' approval, and if not entirely satisfied the full amount will be refunded.

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Telephone: Museum 3772.

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The 'Best Seller' of the Summer Season.

Neat and attractive in appearance, clean to handle and easy to open (the fingers cannot come in contact with the gum), the "ROLO" is at once both useful and ornamental.

Evenly spread on both sides with our special non-drying gum, it is also very highly effective, being, in short, *the ideal Cemetery for Flies!*

The Medical Profession have been recommending the "ROLO" for over 20 years.

The War Office, too, bought large quantities for the use of the troops in Mesopotamia & Salonica.

Made in two SIZES, 1d. & 1½d.

**STONEHOUSE Bros.**  
High St., Old Basford, NOTTINGHAM

TO SHOW IT IS TO SELL IT.

An exceptionally good profit, quick sale—and no risk of large stocks at the end of the season, as you can buy little and often, and have deliveries within 36 hours by passenger train.

Send to-day for samples and prices, or order through your usual wholesale house.



12 PERFECT BLADES  
IN EVERY  
DOZEN.



For Gillette Type Holders.  
3/6 Per Doz.  
post free to any part of the world  
London: 24 Redcross Street, E.C. 1.

They have a super keenness that ensures perfect service and makes them different from and better than all others. If your dealer doesn't stock them write direct:

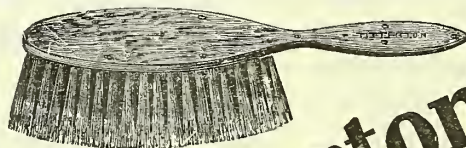
**JOHN WATTS,**  
Dept. 10, Lambert Works  
SHEFFIELD.

Estd. over 150 years.

This advertisement is appearing in 'Punch' and other powerful selling mediums.

Have we had your stock order?

We desire to supply through 'the trade' and allow 33½% discount to retailers.  
John Watts.



**Titterton's**  
Celebrated  
**HAIR BRUSHES**

Tooth, Nail & Shaving Brushes

**TITTERTON & HOWARD, Ltd.,** 8-10 Gt. Titchfield St., W.1.

Factory: Albion Works, Dalston Lane, E.8.

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# BATTLE'S

FOR

Approved Sheep Dips (Liquid, Powder and Fly Paste), Fly Powders, Sheep Colourings, Maggot-Fly Oil, Disinfectants (Liquid and Pink Powder), Weed Killers (Liquid and Powder), Embrocation, Seed Dressings.

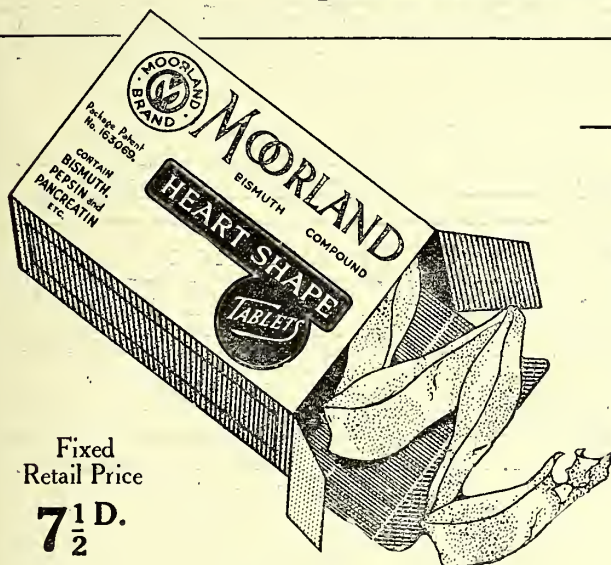
Attractively packed under "own name." Prices on application.

Sole Makers and Address:—

**BATTLE, HAYWARD & BOWER** (formerly BATTLE, MALTBY & BOWER)  
Victoria Chemical Works, Lincoln.



# A step forward in pharmaceutical packing



Fixed  
Retail Price

**7½ D.**

—we couldn't improve  
the tablet so we  
improved the pack

THESE (the original) heart-shaped indigestion tablets are now being supplied packed by the new Sanitape method. Each box contains a long folded chain of wax sealed air-tight compartments—one for each tablet. Your customer can tear off a few at a time for the pocket or bag, and every tablet remains air-tight packed, and protected from dirt and moisture right up to the actual moment of placing it in the mouth. Sanitape is the last word in tablet packing.

Ours is the original heart-shaped indigestion tablet now thoroughly familiar to the public, and has a very large and increasing sale. It is one of those steady repeat order propositions which you can stock and re-stock without needing to think twice about it.

The formula is a good one and excellent for its purpose—for indigestion and stomach troubles, flatulence, etc.

1 gross	...	...	51/- per gross.
5 gross	...	...	48/- " "
Less than 1 gross			4/6 per doz.

**W.B. CARPENTRIGHT LTD.**  
**RAWDON LEEDS**  
*Australia.* 297-299 CASTLEREACH ST SYDNEY  
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10 & 11 MINCING LANE, LONDON, E.C.3.  
**SPECIALITIES.**—Gums Arabic and  
Tragacanth as Imported or finely powdered.

## Pyrogallic Acid Gallic Acid

Manufactured by **J. L. ROSE**  
At ABBEY ROAD, BARKING, LONDON, E.  
Wholesale and Export Only.

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The LONDON RUBBER CO. 183 Aldersgate Street,  
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Save yourselves £ s. d.  
By buying direct from us the Genuine New 6/- Packet of

### U.S.A. GILLETTE BLADES.

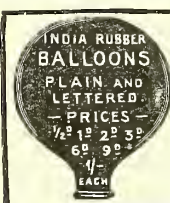
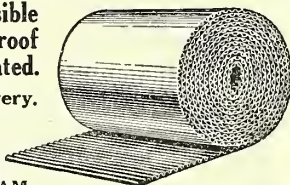
Sample 1/2 doz. Packet sent for 2/-  
5 Boxes @ 33/6 per box. 34/- Per Box  
10 Boxes @ 32/- per box. Registered Post Paid.  
Terms Cash with Order.

**A. LOUIS & CO.,** Merchants and Importers,  
38 Whitechapel Road, E.

Corrugated Rolls. Collapsible  
Boxes. Cartons. Greaseproof  
Corrugated. Tinted Corrugated.

Keenest Prices. Quick Delivery.  
Kindly ask us to quote.

The Guildhall Corrugated Paper Co.  
Dept. C.H. GUILDHALL BUILDINGS,  
NAVIGATION ST., BIRMINGHAM.



### THE ALTRINCHAM RUBBER CO.'S NOTED TOY BALLOONS

Prices : 1d., 2d., 3d., 4d., 6d., 9d. & 1/-  
each, less 33 1/3% discount to the trade.  
Customers' own Advertisement  
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Always in Great Demand.  
Price List on Application.

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Original French **SHAMPOO**



## SHADEINE

FOR COLOURING GREY HAIR

This popular article is largely advertised  
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Trial Size 6d., per post 11d. 1/4 size, per post  
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6d. size, 6/- doz.; 1/4 size 12/- doz.; 2/6 size,  
24/- doz.; 3/6 size, 36/- doz.

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Lightest and Whitest, also Purest Dense

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METOL and other of their well-known Products.  
DRY PLATES.

Write for prices, etc., to the Wholesale Distributors :  
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Agents for Contessa Nethel Cameras.

For GUARANTEED  
**ATOMIZERS and SPRAYS**  
THE DEVILBISS CO., LIMITED  
WEST DRAYTON, MIDDLESEX.

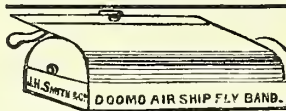
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HAIR CLIPPERS at 4/- each; Spikuson Razors 30/- doz.; Carnos Razors  
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Razors 5/- each; Auto Strip Razors 6/9 each; Gillette Blades 3/6 doz.

List Ready Net Cash Post Free

**BRITISH MADE, ROUND AND SQUARE  
CARDBOARD BOXES**  
for  
PILLS, POWDERS, SOAP, OINTMENT,  
BOTTLES & CHEMISTS' ADJUNCTS.  
Estd. 1850. Wholesale & Export only. Phone : 2505 Royal.  
**JAMES AUSTIN Ltd.** 32 GREAT GEORGE SQUARE,  
LIVERPOOL.

## DOOMO AIRSHIP FLY BAND



Write for quotations  
A wide, long band,  
sticky on both sides.

**SMITH & CO., Doomo Works, NEWARK**

**ART OF DISPENSING.** (9th Edit.) 8/-, by post 8/9.  
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**CHEMIST'S DICTIONARY OF MEDICAL TERMS.**

3/6, by post 3/10.

The CHEMIST & DRUGGIST, 42 Cannon Street, E.C.4



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1/- P.A.T.A., 7/6 per dozen. 1/2 dozen  
Bonus on 3 dozen. The Powder—  
6d. P.A.T.A., 3/- per dozen. 3 dozen  
of each allows us to send the "Peak"  
show that makes a profitable "stir"  
anywhere.

**THOS. CHRISTY & CO.**  
4-12 OLD SWAN LANE, E.C.4. 3



# IN CONSTANT DEMAND THROUGHOUT THE SEASON

'TABLOID' PHOTOGRAPHIC CHEMICALS are extensively advertised. In every case the amateur is referred to the *retailer* for supplies.

The keen pharmacist can secure much profitable business by making frequent window displays of

TRADE MARK 'TABLOID' BRAND

## Photographic Chemicals.

By so doing he links up with and benefits by Burroughs Wellcome & Co.'s advertising. Such displays have often proved the starting point of an extensive photographic business.



Write now for this new window display easel. It costs you nothing.

- 'TABLOID' 'RYTOL'  
Universal Developer, 21/6 per doz.
- 'TABLOID' 'TANCOL'  
Developer, 21/6 " "
- 'TABLOID' CHROMIUM  
INTENSIFIER, 12/- " "
- 'TABLOID' SEPIA TONER, 24/- " "
- 'TABLOID' GREEN TONER, 24/- " "
- 'TABLOID' BLUE TONER, 24/- " "
- etc.

Subject to usual terms



BURROUGHS WELLCOME & CO.  
11, SNOW HILL BUILDINGS  
LONDON, E.C.1

# WARRICK BROTHERS, LIMITED

CHOCELLÆ.  
PULVELLÆ.  
FLEXOIDS.  
FLEXETTES.  
FIZZZLETS. (*Suspended*)  
REFRESHLETS.  
CRYSTADES.  
EXTRAITS AUX FLEURS.  
ESSENTIAL OILS.  
POMADES (FLORAL).  
ROSE WATER.  
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THE "FLAG"  
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Also Special Agents for  
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IRON JELLOIDS.  
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THE CHEMIST AND DRUGGIST is in circulation and reputation the leading journal addressing the Chemical and Drug trades in the British Empire and other countries in the Old and New Worlds. It is the official organ of the Pharmaceutical Society of Ireland, the Chemists' and Druggists' Society of Ireland, and of other Chemists' Societies in the Overseas Dominions.

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## Coming Events

This section is reserved for advance notices of meetings or other events. These should be received by Wednesday of the week before the meetings, etc., occur

### Wednesday, July 19

**Cardiff Pharmacists' Association.** Picnic to Minehead, leaving Cardiff Pier Head at 2.30 p.m., and returning at 9.30. Tickets (7s. 6d. each, including tea) from Messrs. A. J. Harris, D. Brims, O. Jenkins, J. D. Jenkins, and S. H. Willis.

**Edinburgh Chemists', Assistants' and Apprentices' Association.** 36, York Place, at 8 p.m. Summer meeting. Botanical demonstration by Mr. J. Rutherford Hill, Ph.C.

### Thursday, July 20

**Proprietary Articles Trade Association.** Holborn Restaurant, London, W.C., at 3 p.m. Annual meeting.

## English and Welsh News

The Editor would be obliged if subscribers would send him marked copies of newspapers containing items of interest for insertion in this or other news sections.

### Dental Board

The Registrar informs us that a recommendation has been addressed to the Privy Council under Clause 1 (4) of the Dentists Act, 1921, that this section shall come into operation on November 30 instead of on the expiration of one year from the commencement of the Act—namely, July 23, 1922. It is expected that the decision of the Privy Council upon the matter will be announced in the course of a few days.

### Reduction in Railway Rates

As a result of negotiations between the Federation of British Industries and the English and Welsh railway companies, an agreement on the terms given below has been arrived at for a general reduction of railway rates and charges, to take effect from August 1:

1. A general reduction on merchandise traffic by goods train, so that the rates and charges for that traffic will be 75 per cent. above the rates in operation on January 14, 1920, in place of 100 per cent. above such rates, this to apply both to class rates and exceptional rates. All concessions by which any rate charge, etc., has already been reduced to a figure less than 75 per cent. above the corresponding rate on Jan. 14, 1920, will remain unaffected by this settlement.

2. Flat rate increases are to be reduced as follows: 1s. to 6d.; 9d. to 4d.; 6d. to 4d., the 3d. flat rate being unaffected.

3. The rate for smalls to be reduced from 150 per cent. to 100 per cent. above the rates in force on January 14, 1920.

4. This settlement is not to affect the question of merchandise carried by passenger train, nor any present or future negotiations relating thereto.

5. The reductions are to come into force on August 1 next, and it is understood that neither the federation nor the railway companies will apply or be parties to any application for a general alteration to come into operation prior to July 31, 1923, of the rates and charges now agreed. This paragraph is to leave the rights of both parties entirely unaffected when discussing the quantum of the rates to be in operation after the appointed day.

### Public Authority's Views on Borax

The following circular has been issued by the Public Health Department of the City of York:—

We have been authorised by the Health Committee to call your attention to the fact that we have recently purchased several samples of "Borax," which have yielded, upon analysis by our public analyst, quantities of arsenic varying from 200 to 400 parts per million, whereas the limit of arsenic allowed by the British Pharmacopoeia is 5 parts per million. It appears to us that the cheaper article—crude commercial borax—such as is sold for laundry and household purposes, is being sold across the counter for medicinal purposes. Care should be taken that only the purified borax of the British Pharmacopoeia is sold for the latter purpose, and it should be labelled with the British Pharmacopoeia title of "Purified Borax." It is obvious that the sale of crude borax for medicinal purposes is dangerous. You had better take up the matter if necessary with your wholesale dealers, as we shall probably have to take legal proceedings against the vendors from whom we purchase any future samples of borax containing such high percentages of adulteration, if sold for medicinal purposes.

The circular is signed by the medical officer of health and the chief food and drugs inspector.

### Theft Cases

At Northwich, on July 3, George Nicholas, farmer, was charged with stealing a bottle of health salts, value 10d., from the shop of Mr. Sydney M. Bostock, chemist and druggist, Bull Ring. Mr. Bostock stated that he had been missing goods for the last ten weeks, and the defendant came to his shop every week with eggs. Watch was kept, with the result that the accused was seen to take the bottle of salts. He was fined £5.

At Tunbridge Wells, on July 3, William Alexander Grant was charged on remand with stealing the sum of £27 17s. 2d., belonging to his employers, the Lion Drug Stores, Ltd. Mr. Edward Tom Hayball, chemist and



druggist, a director of the company, said that the accused was engaged as manager of the Tunbridge Wells branch on March 24 last. On June 21 witness called at the branch, but did not see him. As he did not appear for some time witness went through the records of the takings book, but failed to discover any trace of the takings for June 17, 19 and 20. The accused was sentenced to three months' hard labour.

At Tower Bridge Police Court, London, on July 8, Robert Spencer, whose occupation was not stated, was charged with being concerned, with another man not in custody, in stealing three bottles of toilet preparations, value 3s., from the shop of Poingdestre and Truman, chemists, 135, Great Dover Street, S.E. Mr. Henry Vernon Truman, chemist and druggist, stated in evidence that the two men entered the shop on the previous afternoon and forced some brooms they were offering for sale almost into his face in order to distract his attention, while one or other of them put his remaining brooms on a counter full of goods. Finally they lifted up the brooms, and witness heard the "clink" of bottles. Both men then rushed out of the shop "like a stone from a catapult," and witness noticed that some bottles were missing from the counter. The accused was sentenced to three months' imprisonment.

### Birmingham

A remarkable fall of the barometer occurred in Birmingham on July 6, when the reading was the lowest for thirty-five years.

The Great Western Railway Company has put on four additional two-hour services each way to and from London.

An attempt is being made to lessen the amount of pilfering going on among railway employees by appealing to them through their trade union leaders.

Miss Christine Southall delighted a large party at the Woodbrooke Settlement, on July 8, by her clever acting, singing, and dancing in the rôle of a gipsy girl.

Miss V. J. Alcock, daughter of Mr. F. H. Alcock, F.I.C., Ph.C., has been appointed science mistress to the Smethwick Council's High School for Girls. There were thirty applicants.

### Liverpool

Bismuthated tablets form a popular window-display.

With a promising return of seasonable weather, business has improved.

More than 100 tickets were sold for the Liverpool Chemists' Association's excursion.

Mr. J. G. Everett, Ph.C., a well-known lecturer in a London college of pharmacy, is on a visit to the Liverpool district, and is to visit the Lake District, with a Liverpool pharmacist as guide.

Mr. T. Fell Abraham, Ph.C., who is enjoying the best of health in his semi-retirement, has been visiting some pharmaceutical friends in Liverpool this week. He announced the pending marriage of his son and departmental successor in business, who shortly will take up residence in Gambier Terrace.

Experts are to report on the various proposals for improving the means of transport across the Mersey by means of a development of the sub-river railway or of an overhead bridge. Meanwhile, the ferry service is being accelerated. Liverpool, however, has much leeway to recover before it can rival New York transport facilities by day and night.

As a sequel to the golf matches recently played between Manchester and Liverpool pharmacists, a meeting was held on July 4, in the Royal Institution, Colquitt Street, and it was decided to form "The Liverpool and District Pharmacists' Golfing Society." All pharmacists interested are requested to communicate with the secretary, Mr. F. B. Derrick, 303 Aigburth Road, Liverpool.

The students of the Liverpool School of Pharmacy paid a visit to the manufacturing laboratories of Evans Sons, Lescher & Webb, Ltd., during the last two days of the session just closed, in two parties of 40. Each party was divided into four groups, and the groups were conducted through the works under the direction of Mr. Sendall (the chief) and Messrs. Cameron, Manson and Turner (depart-

mental managers). All kinds of processes, ranging from the grasping of logs of quassia wood to the percolation of a ton of podophyllum rhizome, were watched in operation. The visit concluded with a sumptuous meal at Reece's Café. A vote of thanks for the kindness and hospitality shown was moved by the principal, Mr. H. Humphreys Jones, and was carried with enthusiasm.

### Manchester

Miss Winnie Greedy, a young lady employed by Mr. R. G. Edwards, Ph.C., Fallowfield, is lying in the Manchester Royal Infirmary suffering from serious injuries sustained while diving at the Victoria Baths.

At a special meeting of the British Association of Chemists, held in Manchester on July 8, an unemployment benefit scheme was confirmed, and it was decided to put the scheme into operation immediately. The annual meeting of the Association is to be held in Manchester in October. Dr. H. Levinstein is the President-elect.

Mr. A. B. Spedding, F.S.M.C., chemist and druggist (Bryant & Spedding, Ltd., chemists, Deansgate), has recently returned from a tour in Portugal, where he has obtained first-hand information on the wine trade. Mr. Spedding has entered into partnership with Mr. Blackett, wine grower and shipper, Liverpool, Oporto, Lisbon and Paris.—The premises at present occupied by Messrs. Bryant & Spedding will revert to the owners of the property in September.

### Miscellaneous

**FIRE.**—Damage was done by an outbreak of fire at the establishment of Mr. E. N. Swift, chemist and druggist, Deansgate, Bolton, on July 7. The blaze originated in the storeroom upstairs; the cause is unknown.

**TOWN COUNCIL DISCUSSES SHOP SIGNS.**—At a meeting of the Burnley Town Council, on July 6, a discussion took place on a proposal to tax signs over shop doors. It was stated that, as an alternative to taxation, the Council had power to order the removal of such signs; but effective opposition to either course is foreshadowed.

**FALSE-PRETEXTS CASE.**—At the recent Guildford Quarter Sessions, Stafford Plowman (33) was sentenced to three months' hard labour for obtaining sums of money from two men on the pretence that he could appoint them as travellers to Carter and Sons, wholesale druggists, Caledonian Road, London, N., from whose service, it appeared, he had been dismissed.

**STANLEY JONES' EMPLOYEES' OUTING.**—On July 1, under the presidency of the governing director, Mr. F. G. Lucas, the employees of Stanley Jones & Co., Ltd., shopping specialists, 8 Gray's Inn Road, London, W.C., held their annual outing at Hindhead, Surrey. The men journeyed by charabanc to the Seven Thornes Hotel, where luncheon was provided, after which sports were held.

**POISONING.**—An inquest was held at Burgess Hill, on July 6, on the body of Mr. H. J. E. K. Herring, M.A., whose occupation was given as science demonstrator. The evidence showed that he usually carried phenacetin tablets and mercury perchloride tablets in his pockets, and died from accidentally taking one of the wrong kind. A verdict was returned correspondingly.

**INQUEST ON A CHEMIST.**—At Bridlington, on July 5, an inquest was held on the body of Mr. Herbert Brown, chemist and druggist, Mansfield Road, Nottingham, who, as reported in our last week's issue (p. 51), was found dead on the beach on July 4. A medical witness stated that death was due to drowning, apparently following shock from the cold water, and a verdict to this effect was recorded.

**ELECTROLYTIC DISINFECTANT STATISTICS.**—The latest annual report of the Poplar medical officer of health, covering the year 1921, states that in the course of the year 51,330 gallons of electrolytic disinfectant fluid was manufactured, at a cost of £355 6s. 6d., exclusive of the cost of bottling, electric stirring, and water. (In the previous year the quantity manufactured was 39,255 gallons.) Before distribution the fluid is diluted with an equal volume of water. The total quantity supplied



during the sixteen years the plant has been working is 628,089 gallons.

**GIFT OF JAPANESE LACQUER.**—The Victoria and Albert Museum has received a valuable gift of Japanese lacquer. Mr. R. A. Pfungst having presented to the nation the whole of the fine collection of medicine cases (inro) which has been exhibited, on loan, for the last five years. This series ranges in date from the 17th to the 19th century; and, in conjunction with the earlier examples which the museum owes to the generosity of the late Mr. George Salting, the late Mr. Alexander and Mrs. Sage, this section of the museum is now in a strong position. The collection is exhibited in Room 41 of the museum.

**CLAIMS IN RESPECT OF "T.N.T."**—At a sitting of the Royal Commission on Awards to Inventors, on July 10, claims in respect of the manufacture of "T.N.T." were made by Lieutenant-Colonel Craig, Sir Robert Robertson (a Government chemist), Dr. R. C. Farmer, and Dr. G. Rotter. It was stated by their counsel that the claimants were asked to lay down plant capable of producing three tons of "T.N.T." a week by an old process. Instead, they worked out the whole thing *de novo*, and by devising an incomparably better process they produced 1,000 tons a week, and in their estimation saved the country £2,500,000. During the war 107,000 tons of "T.N.T." was produced by the claimants' process.

## Irish News

### Brevities

Mr. T. King Beattie, Ph.C., has opened a pharmacy at Main Street, Fintona, Co. Tyrone.

On the morning of July 10 the premises of Mr. William Kelly, Ph.C., Buncrana, Co. Donegal, were broken into and practically the whole contents of the shop and stores destroyed, while several articles of value are missing. An estimate of the destruction places the amount at about £400. Mr. Kelly has lately been in receipt of threatening notices.

There is no news of Mr. W. A. Murphy, Ph.C., Pettigo, who was kidnapped five weeks ago by Republicans (*C. & D.*, June 17, p. 39). The matter was raised in the British House of Commons on July 7, when Mr. Pennefather asked the Colonial Secretary whether he had yet received from the Provisional Government replies to his inquiries as to the fate of the Loyalists captured at Pettigo; if so, would he state the nature of such replies. The answer was in the negative. An unofficial report on July 8 stated that Mr. Murphy was a prisoner in Glenties Workhouse, Co. Donegal.

### Belfast

William Doig & Co., wholesale druggists, Mill Street, have taken over premises in 76 Royal Avenue.

Belfast drug-houses which were closed during the week for the annual holiday will reopen on July 17.

Considerable difficulty and delay having arisen as a result of goods for Belfast and the North of Ireland being forwarded through Dublin, the Ulster Retail Drug Trade Association suggests that consignors forward goods direct to Belfast.

At the Police Court, on July 7, five men named John McKenna, Frank Broderick, Joseph McGivern, Patrick Mulcahey, and Charles Hagan were charged with attempting to fire the premises of T. H. Daniels & Co., chemical manufacturers and drysalers, Sorella Street, Grosvenor Road, on June 21. Mr. Daniels said when he came back from England on the day following the burning he discovered damage to the extent of about £1,500. Prisoners were committed to the Assizes.

### Londonderry

Fred Storey, Ltd., wholesale druggists, Alfred Street, Belfast, has secured the contract for supplying medicines to the Londonderry District Lunatic Asylum for the six months ending December 31, 1922.

A large plate glass window in the shop of Prior & Co., chemists, Ferryquay Street, Londonderry, was recently smashed. In connection with the affair John Duffy, a one-armed man, has been arrested.

## Scottish News

### Bowls : Edinburgh v. Glasgow

The annual bowling match between Edinburgh and Glasgow chemists was played on Queen's Park green, Glasgow, on July 5, when four rinks from each city met. Play was as follows:—

Edinburgh.		Glasgow.	
J. A. Cochrane (skip) ...	24	H. P. Arthur (skip) ...	22
C. R. Brown (skip) ...	13	Geo. W. Donald (skip) ...	17
F. Stuart (skip) ...	19	M. Wallace (skip) ...	26
— Smith (skip) ...	12	A. G. Sutherland (skip) ...	22
	68		87

After the game the visitors were entertained in the Royal Restaurant, where prizes given by Munro, McLaren & Sutherland, Cadogan Street, Glasgow, were distributed. The winners were Messrs. A. G. Sutherland, W. D. Paterson, C. Finlayson and D. McNicol.

### Brevities

It is stated in the "Northern Scot" that an outbreak of grass disease in Morayshire has resulted in the death of several horses, and that an adequate supply of serum has not been available.

The Very Rev. Monsignor William Clapperton, youngest son of the late Mr. Thomas Clapperton, chemist and druggist and wine merchant, Fochabers, has been appointed Rector of the Scots' College of the Gregorian University, Rome.

Mr. W. G. Robertson, M.B., Ch.B., son of Mr. W. G. Robertson, Ph.C., Cupar, Fife, has graduated M.D. at St. Andrew's University. His thesis, which received commendation, was entitled "Development of the Sympathetic System in Man."

Mr. William Wallace, chemist and druggist, 41, Princes Street, Ardrrossan, has disposed of his business at 44, Dockhead Street, Saltcoats, to Mr. William Cox, chemist and druggist, who will carry it on in his own name. Mr. Wallace retains the Ardrrossan business.

In beautiful weather, six rinks from the bowling section of the Glasgow Pharmacy Club met on Whitevale Green on July 11. Prizes, consisting of tobacco pouches and pipes, given by Mr. David Black, Alexandra Parade, were won by Messrs. George McDonald (skip), George Thomson, J. Murchie, and W. Wood Wilson.

We are indebted to a correspondent for a copy of "The Perthshire Constitutional and Journal," of July 3, which contains a full report of the proceedings at the presentation to Mr. Thomas Harley, Perth, referred to in our last week's issue (p. 40). Among the visitors present were ex-Provost Raffan, Stirling; ex-Provost Scott, Callander; Mr. James Anderson, Dundee; and Mr. C. Stephen, Dundee. Another issue of the same newspaper gives an account of an address delivered by Mr. Harley, at a meeting of the Perth Rotary Club, on the subject of his holiday in the Canary Islands last winter.

### Edinburgh

At Edinburgh Sheriff Court on July 4 Charles S. Armour, described as an apprentice chemist, was fined £1 for driving a motor-car recklessly.

The Royal Caledonian Horticultural Society recently visited the herb farm of Duncan, Flockhart & Co., and the party was conducted round by Mr. R. Glode Guyer, Ph.C.

Business in Edinburgh and the district, commercial travellers say, is excellent compared with most of the manufacturing centres, especially in the West of Scotland. One traveller is understood to have obtained more orders in Edinburgh in three days than during three weeks spent in the Glasgow district.

The Edinburgh Chemists' Golf Club held a competition for the Pinkerton Gibson trophy on July 5 over 3½ants-field course, with the following result:—(1 and 2) Mr. James Finlay (77 scratch) and Mr. James Manson (87-10=77)—equal; (3) Mr. W. Spence (91-13=78). Class II.—Mr. Robert Robertson (99-18=81), Mr. K. J. C. MacLennan (97-16=81).



## French News

(From the "C. & D." Paris Correspondent.)

M. ALBERT RECOURA, Grenoble, has been elected corresponding member of the Academy of Sciences in the Chemistry Section, in place of the late M. Solvay.

M. TARBOURIECH, Professor of Pharmacy at the Montpellier Faculty of Pharmacy, in November next, will pass to the titular chair of Organic Chemistry, left vacant by the superannuation of M. Astre.

TREATMENT OF HAY FEVER, by Dr. Barcat's method, by applying radium or x-ray action to the affected membranes, was described recently by M. Balzer at the Academy of Medicine. It is stated to be very successful.

DR. DOURIS, the Nancy Faculty of Pharmacy, who headed the local delegation at the celebration of the seventh centenary of the foundation of the University of Padua, has been nominated a doctor "honoris causa."

GIFTS TO SCIENCE.—The late Prince of Monaco bequeathed one million francs to the Academy of Sciences and a similar sum to the Academy of Medicine. The Academies are free to dispose of the amounts as they think fit.

RED SNOW.—Two military pharmacists, MM. Remy and Pons, analysed the "red snow" which fell near Briançon last March, and their report was recently read to the Academy of Sciences. The colouring element was found to be ochre dust. Ochre is extracted at Apt (Vaucluse).

RESEARCH SCHOLARSHIP ESTABLISHED.—The 100,000 fr. collected for Prof. Henry Le Chatelier in celebration of his scientific jubilee has been placed by him at the disposal of the Academy of Sciences. The interest of this sum will be awarded every two years as a research scholarship.

M. PERROT, Professor of Materia Medica at the Paris Faculty of Pharmacy, is President of the Interministerial Committee of Medicinal Plants. In this capacity he accepted the chairmanship of the Second National Congress on the cultivation of medicinal plants held at Bourges in June.

M. LETOURNEUR, pharmacist, Cherbourg, after taking digitalin, shot himself with a revolver. A Parisian journalist, commenting on the case, remarks that "doctors are usually of a jovial nature, while pharmacists are morose. They suffer, one might say, from a sort of professional neurasthenia."

M. FERDINAND BADUEL, who died recently, was a pharmacist by profession, and, at the time of his election as a Member of the Chamber of Deputies (1906), was President of the Pharmacists' Association of the Cantal department. He sat for the town of Murat, where he had a shop, and was re-elected in 1910.

NO DYE ALLIANCE WITH GERMANS.—The Société Anonyme des Matières Colorantes et Produits Chimiques de St. Denis (formerly Poirrier & Dalsace) has denied in several Paris dailies that it has any connection or arrangement with German manufacturers. [Our correspondent writes: This evidently alludes to a question raised in the British House of Commons and reported in the *C. & D.*, April 29, p. 70. The firm, of which the late Senator Poirrier was at one time chief, has its Paris offices at 105 rue Lafayette. It is an old-established concern, with a capital now amounting to 24,000,000 fr. The Compagnie Nationale de Matières Colorantes has its Paris offices at 134 Bd. Haussmann. Its capital is 100,000,000 fr.]

FRENCH PHARMACISTS' GENERAL ASSOCIATION.—The annual gathering of the French Pharmacists' General Association was held at the Paris Faculty of Pharmacy on June 25. One of the principal subjects was that of price protection. There are three price protection organisations in France. The "S.G.R.," headed by M. Comar, seeks to secure 25 per cent. profit to the retailer. The group led by M. Chevret, of St. Etienne, insists on 30 per cent. Each of these claims to control, roughly speaking, a third of the proprietaries manufactured in France. But the "S.G.R." is still at loggerheads with

the manufacturers, who recently "denounced" the contract entered into in 1920, and no new contract acceptable by both parties has yet been drafted. There is a third group, comprising a somewhat limited number of owners of proprietaries which are advertised on a very extensive scale, who cannot, for this or other reasons, consent to such large discounts. The policy of more or less personal and private agreements seems in consequence inevitable.

MONTPELLIER.—Interesting as the site of one of the oldest Universities in Europe, the headquarters of one of the three French Faculties of Pharmacy, and as the gathering-place of the 1922 meeting of the Association for the Advancement of Science, Montpellier has little to attract the average tourist (writes our correspondent). It is a pleasant old-world town, proud of its promenades, the Peyrou and the Placé de la Comédie, although the visitor will probably prefer the Jardin des Plantes. Esconced in a sheltered hollow, behind the windscreen of cypresses, the old Elizabethan garden is delightfully peaceful, shady, and well kept. Besides very numerous specimens from the Himalaya, California, etc., there are fine exhibits of the local trees, the micocoulier or nettle-tree cypress, Aleppo pine, and the evergreen oak (*Quercus ilex*). Two of the latter stand near the statue recently erected to Rabelais, an ex-student and Doctor of Montpellier, and may have existed in his day; they are, at least, 300 years old. De Candolle laid out the plots for botanical study, and busts of famous local botanists and professors are placed round this garden.

DEFINING MINERAL WATER.—The decree of the Minister of Agriculture concerning the sale of mineral waters defines "spring water" (eau de source) as potable water bottled (at the spring named) in its natural state. "Mineral water" or "natural mineral water" must have therapeutical properties; "aerated water" (eau gazeuse) must be naturally gaseous, and both must come from springs officially authorised by the Government. "Artificial mineral water" must be potable water to which mineral matter has been added. The local prefect's approval is necessary for the manufacture of these, as well as for aerated waters, which must be potable waters "rendered gaseous by the addition of pure gases." One of the above titles must appear on every receptacle in letters over two inches high. The name of the spring and its locality, the date of authorisation, and name and address of proprietor or dealer must also appear on the label; or, if it be a "mineralised" or "aerated" water, the manufacturer's name and the date of the prefect's permit. Non-observance of these details or fraudulent and deceptive labels, descriptions, etc., will be punishable under the 1905 Anti-Adulteration Act. These regulations come into force in six months' time.

PARIS SOCIETY OF PHARMACY.—At the June meeting of the Paris Society of Pharmacy, a letter was read from M. Bagros, criticising M. Pageot's proposition to revise the Codex formula of iodised syrup of horse-radish. M. Pageot had proposed to adopt the formula of the 1884 Codex. The matter was referred to the Society's sub-committee for Codex revision. M. Hcrissey explained his simple and rapid method for the detection of salicylic acid in blood or serum. M. Lebeau presented Mr. Delaplace's paper on the solubility of sulphur in some organic solvents, and a note by Mr. Lachartre on the presence of iodates in iodide of potassium. As a retail pharmacist of twenty-five years' experience, M. Lafay, President of the Society, offered some observations on Codex revision. The Codex, which ought to be the "bed-side volume" of the retail pharmacist, follows the evolution of the profession at a respectful but inconvenient distance. Of the numberless fluid extracts and granules introduced during the last thirty-five or forty years, the Codex gives twelve of the former and two of the latter. Many articles daily sold over the counter it totally ignored; for instance, the "energetenes" or vegetable opotherapies, and the "intrants" or extracts of fresh stabilised plants. Tablets are sparingly admitted into the French pharmacopœia, to the greater satisfaction and undeniable profit of foreign manufacturers. Above all, hypodermic injections require bringing up to date.



## Colonial and Foreign News

**SACCHARIN REGULATIONS IN DANZIG.**—The Senate of the Free Town of Danzig has elaborated a Bill to regulate the manufacture and sale of saccharin. It is proposed to erect a saccharin factory which will pay to the State a royalty of 30 mk. on every kilo. of saccharin manufactured, while the sale price within the limits of the free town will be fixed by the Senate, in relation to the prices ruling in Germany and in Poland.

**DRUG-TARIFF IN SARRE TERRITORY.**—The Government Commission of the Sarre Territory has promulgated a decree enforcing the latest edition of the German official drug-tariff as the legal basis for pricing prescriptions, etc. A special extra charge shall be made by the pharmacists of the territory on the rates fixed in the German tariff to cover the high cost of living. This charge will amount to 60 per cent. of the drug-tariff rates in all prescriptions, and 30 per cent. on specialities and counter articles.

**DANGEROUS DRUGS REGULATIONS.**—The Director of the Civil Medical Department has informed Norwegian pharmacists and wholesale druggists that in consequence of the International Opium Convention, and particularly as a result of an agreement with Great Britain, prior to an import licence being granted for crude or medicinal opium, morphine, cocaine, heroin, their salts, and any preparation containing over 0.2 per cent. of morphine, or 0.1 per cent. of cocaine, the applicant must declare that goods specifically enumerated, to be imported from (name of country), are intended solely for legitimate medical or scientific uses, and will not be exported from Norway.

A NEW MEDICINE TARIFF, for pricing prescriptions, was recently published by the Government of the kingdom of the Serbs, Croats, and Slovenes, and any cases in which the charges fixed in the tariff are exceeded by pharmacists should be reported to the health authorities. Since the elaboration of the new tariff was begun in July last year the charges bear no relation to existing conditions, principally in consequence of the general rise in prices. The pharmaceutical associations of the kingdom have protested against the new tariff, and the Minister for Public Health has at last consented to appoint a commission to investigate the proposals submitted by the pharmacists, and to revise the new terms.

**FOREIGN SPECIALITIES IN ROUMANIA.**—The General Board of Health in the Roumanian Ministry of the Interior has issued a decree supplementing the existing regulations. In future foreign manufacturers of proprietary preparations will be required to apply for registration of each product to be placed on the Roumanian market. This application must set forth the uses of the preparation and the basis of its therapeutic action. A full disclosure, quantitative and qualitative, of the ingredients must be made, attaching at the same time the report of an analysis of the product carried out in a Roumanian State laboratory. For this analysis a fee of 100 lei has to be paid. The applicant must at the same time certify that the sale of the speciality is permitted in the country of origin. Each application must be accompanied by ten packages of the preparation, and directions for use in Roumanian. Wholesalers and pharmacists are forbidden to stock unregistered foreign specialities, which are liable to confiscation.

**CALCUTTA SCHOOL OF TECHNOLOGY.**—Under the privilege extended to the School of Chemical Technology, Calcutta, by the Excise Department, Bengal, for the supply of excisable drugs at concession rates of duty, the first instalment of rectified spirit for use in commercial manufactures was obtained by the school during April 1922, an event which marked the beginning of a new era in the life of the pioneer Technological Institute, initiated three years ago by private enterprise. During this probationary period only experimental manufacturing work in so far as the very limited means of the Institute could permit was being carried on, and necessary raw materials—namely, belladonna, digitalis, and other potent drugs—having recently been received, the school was placed only in April last in a position, particularly by the Excise concessions referred to, to present its products for sale. The students of this school have the advantage of thoroughly learning standardisation.

**PERFUMERY INDUSTRY IN ITALY.**—A meeting was recently held in Rome, attended by representatives of the leading Italian manufacturers of perfumes, in order to discuss the present unsatisfactory position of the industry. Better to safeguard their interest an association was formed under the title "Federazione Nazionale fra Industriali, Commercianti, Profumieri ed Affini," with a central office in Milan, including not only manufacturers but also wholesalers and distributors. The existing taxes on all articles of perfumery formed the subject of a prolonged discussion, and in view of the adverse conditions prevailing it was decided to petition the Government to permit the retailer to affix the stamp on the container at the time when the perfume is actually sold to the purchaser, in other words, that the duty on the retail sale of such preparations should be paid only when a sale is actually effected, and not levied when a consignment is delivered to the distributor. To give effect to the wishes of the members it was decided to appoint a special commission, consisting of experts, and one of the chief demands is that the existing system of taxation on perfumes should be revised, and that all perfumes the retail price of which does not exceed 3 lire should not be taxed.

**EGYPT PROHIBITS NARCOTICS.**—The Egyptian "Journal Officiel" of May 11 contains a decree, dated May 8, 1922, which prohibits, as from May 27, the importation into and exportation from Egypt of the following drugs except under special licence from the Minister of the Interior:—

Opium, crude and officinal, and its preparations; morphine and other alkaloids of opium; salts and derivatives (except codeine), as well as preparations containing more than 0.2 per cent. of morphine; heroin and its salts, and preparations containing more than 0.1 per cent. of heroin; cocaine and its salts and coca, leaves and fruits and all preparations containing more than 0.1 per cent. of cocaine; cannabis indica (hashish) and its preparations in any form. The decree empowers the Minister of the Interior to add to this list the names of any other drugs the importation of which might be harmful. An Order of the Minister issued on the same day as the above-mentioned decree lays down the conditions under which licences for the import and export of prohibited drugs will be granted, and states that when such licences are granted duplicates will be sent to the importer or exporter in Egypt for despatch to the interested party in the exporting or importing country as the case may be.

**DISPENSING DOCTORS IN SWITZERLAND.**—Switzerland is one of the few Continental countries where doctors may dispense medicines for their own patents, although few practitioners do so, except in rural districts. An arrangement arrived at by a number of leading wholesale druggists with regard to supplies to dispensing doctors, which, however, only applied to chemicals and drugs, has now been extended by a further agreement between the association of Swiss firms supplying dispensing doctors and the commission for regulating the prices of packed specialities of the Swiss Pharmaceutical Association, whereby the following discount on proprietary medicines is allowed to dispensing doctors:—

Specialities sold only on a medical man's prescription, retail price not exceeding 2.50 fr. ....	20 per cent.
Ditto, retail price not exceeding 4.40 fr. ....	15 "
Ditto, " exceeding 4.50 fr. ....	10 "
Specialities sold only in pharmacies ....	10 "
Specialities with unrestricted sale ....	10 "
Dietetic preparations ....	10 "
Infants' foods ....	5 "

No discount is allowed on special packages for hospitals, or exclusively used by the practitioner himself. In most Continental countries the pharmacist usually grants a discount on all medicines supplied to a medical man for his own use. To secure uniform treatment the above scale of discounts shall also apply to doctors' personal orders. Manufacturers of specialities, and their representatives in Switzerland, have been invited to submit their prices to be charged to dispensing doctors, based on the above scale, to Dr. Maeder, in St. Gall, the secretary of the Commission of Specialities, so that the new prices to doctors may be included in the catalogue and wholesalers' price lists.



## South African News

(From "C. & D." Correspondents)

"The Chemist and Druggist" is supplied weekly to members of all the Chemists' Societies in South Africa

### Rhodesia

**BUSINESS CHANGE.**—Smart & Copley, pharmaceutical chemists, Bulawayo, have converted their business into a limited liability company under the style of Smart & Copley, Ltd. Mr. W. Dawn Copley remains at the head of the firm as managing director, and associated with him as directors are Messrs. J. C. More, R. C. Kerridge, pharmacists, and Mr. H. B. Miller, all old servants of the firm. The business was established in Bulawayo twenty-five years ago, and Mr. W. Dawn Copley, who has been at the head of affairs ever since, is looking forward to a further long period of active service.

At the annual meeting of the Bulawayo Chamber of Commerce held recently it was stated that the general position in Rhodesia is thoroughly sound, despite certain manifestations of depression common to the whole world. Reckless and inflated importing was never resorted to after the war, steady business having been the rule. The recent drought had an unfortunate effect on trade, and the restriction of mining operations on account of low prices was also an adverse factor, but hopes were raised of increased mining activity in the near future. Though in 1921 the adverse balance of trade against the country was £276,000, much of this is to be attributed to unusually heavy imports for railway construction and use. Of the total imports of £5,091,000, which are almost the same as in 1920, the British Empire supplied £3,000,000, while South Africa and foreign countries shared equally the balance. Germany's share advanced from £22,000 in 1920 to £171,000 in 1921, and in the same period Italy shows an increase from £6,000 to £20,000.

## Chaulmugra Oil

AN interesting account of the tree yielding chaulmugra oil has recently been published in the United States Department of Agriculture (Bull. No. 1057), by Mr. J. F. Rock, who holds the office of agricultural explorer. He points out that although the British Pharmacopœia has correctly described and defined the oil as being expressed from the seeds of *Paraktogenos Kurzii*, there has been a prevailing tendency to designate the oils from some closely related botanical sources as chaulmugra oil. The oils from certain species of *Hydnocarpus* are very similar to it in their physical characters and chemical composition, and are known to be used for the same purposes in the countries of their production. Among them are those of *Hydnocarpus Wightiana* Blume, used in Western India, and *Hydnocarpus anthelmintica* Pierre, used in China. Besides these, Mr. Rock mentions *Hydnocarpus castanea*, also *Hydnocarpus Curtisii*, of which the bark is used for skin diseases. He also points out the occurrence of chaulmugric acid in the oil of *Oncoba chinata* Oliver, to the extent of 84 per cent. This plant is a native of Sierra Leone, where the seeds are known as "Gorli." It belongs to the same family (*Bixaceæ*) as the chaulmugra. He has visited the localities where the chaulmugra trees grow, and has added more recent information concerning them. When visiting Bangkok, he found several trees of *H. anthelmintica* in fruit, and from a tree growing in the asylum gardens there he forwarded some ripe seeds to Honolulu, where they promptly germinated, and there are now several thousand of the trees growing. It also germinated freely at Singapore. It is a handsome and ornamental tree when well grown, and has been extensively planted in the grounds of the Temple at Bangkok and in a street behind the Golden Mount there. It seems that the male flowers appear in the winter and again in April. Nothing seems to be known at the Government Forest Office concerning the fruiting habits of this plant, nor how long the fruit takes to ripen, though it is found to be ripe in July. He also learnt that it grows plentifully in Eastern Siam, near

Korat, and that several trees were in cultivation in Chiangmai. The tree was plentiful enough there to be felled for firewood. The seeds, which are used by the Siamese for skin diseases, are exported to China, and are then called "ta-fung-tsze," although the Siamese name is "Lukrabao," or "Maikrabao." The price of the seed in China is \$20 for 100 lb., but only 32 per cent. of the seeds consists of kernel. Although *Paraktogenos Kurzii*, which yields the true chaulmugra seeds, was first sent to Col. Prain by Dr. Geo. Watt in 1900, at whose instance it was collected in the Kassalong forests in the Chittagong hills, it is evidently widely distributed in Burma, and is reported by Mr. Rock to occur in the neighbourhood of Mewlaik in the Upper Chindwin district and in the forests of Pegu. About fifty miles from Mawlaik, at a village called Khoun Kyew, Mr. Rock found the chaulmugra trees growing on the steep hillsides, which consisted of a greyish, loamy quartz sand, some even growing in the stream bed of the creek below. The only way to approach the place where the chaulmugra tree grows freely is apparently to follow creek beds, which are dry in the winter. The fruits appear to be produced at irregular intervals, a heavy crop being followed by two years of small crops, so that collection of the seeds takes place about once in three years, and is limited to the months of October and November. They mature during the rainy season from May to September. About 50 per cent. of the crop is lost because bears are very fond of the flesh of the fruit and travel in herds, so that the collection is postponed till after they have taken their fill. A number of seeds are floated into the creek and thence into the Khodan stream, in which the fish feed on them. Wild pigs also feed on them. The flesh of both animals is not eaten during the seed season, as it produces nausea and vomiting. The natives proceed in parties of twenty or thirty to collect the remaining seed. The tree develops a strong and vigorous taproot, which enables the tree to resist strong currents when they grow in the stream. Mr. Rock found that the best way of packing the seed for growing was to use moist, powdered charcoal in cotton bags, which were wrapped securely in strong oil paper, then in heavy Manila wrapping paper securely tied. Thus packed they reached Honolulu, and germinated well on arrival there. Mr. Rock found that Smith, Stanistreet & Co., of Calcutta, used chiefly the seeds of *Hydnocarpus Wightiana* to obtain the oil from which they prepared the ethyl esters used by Dr. Muir in the leprosy station of the Calcutta School of Tropical Medicine. At Chittagong he found that the true chaulmugra oil from *Paraktogenos kurzii* is manufactured there by a Bengal firm, Prasana Kumar Sen, and sent to Glen & Co., of Calcutta. The seeds on arrival are washed, then dried in the sun for one to two days, sorted and placed between corrugated rollers worked by a hand crank. They are then placed in jute bags about a foot square and one inch thick, and five layers of eight bags each, with a steel plate above each layer, is submitted to hydraulic pressure. The cold-drawn oil is collected in tin cans and filtered through blotting paper. The resulting cake, which contains 6 per cent. of nitrogen, is sold as manure to tea planters and paddy-field owners. Mr. Sen said that it was difficult to keep up the supply of seeds, and that he had to advance money to the jungle people in order to do so. This is due partly to the fact that the jungle people are more or less indolent, and possibly to the fact that the trees are polygamous, and are found growing sporadically under the conditions only where the soil meets their requirements. Mr. Rock suggests that the lowest yearly demand for the oil will be for 1,000,000 litres, and that the demand will exceed the output. He recommends the cultivation of the tree and gives the following suggestions regarding its requirements. The soil should be of a sandy nature, preferably quartz sand, on hilly or undulating land, with perfect drainage. The region should have a distinct rainy season with a pronounced dry season in the winter months, but still with considerable humidity, and the winter temperature should not fall below 40° F. The trees grow best along creek beds or on the banks of streams. The climate suitable for an evergreen rain forest suits the chaulmugra tree.



## Legal Reports

**Dispute over Bottle Moulds.**—In Bow County Court, on July 7, Mr. Frederick Smith, bottle-mould maker, Lea Bridge Road, E., sued D. Elson and Co., Ltd., glass bottle manufacturers, Walbrook, E.C., to recover the sum of £11 12s. for bottle moulds made. There was a counterclaim for £60 as damages for the alleged improper making of the moulds. Mr. C. T. Williams appeared as counsel for the plaintiff, and Mr. Gould was counsel for the defence. The plaintiff, giving evidence, said that some bottles were brought to him and he was asked to make moulds for similar ones. There was the wording "Galjado" on the side of a piece of pasted-on paper. He was given instructions to mould the lettering exactly as it was on the sample. He made the moulds, but there was subsequently a complaint as to the lettering, it being suggested that it should be block lettering. Plaintiff pointed out that he had done as he was directed, but this was denied, and he was supplied with specially-drawn lettering. He was asked if he could take the lettering out, and he did this by acetylene gas welding. For the defence, Mr. Sidney Ewart Bullock, works manager to the defendants, said he told the plaintiff to work to the directions on the bottle, and he considered no mould-maker would be so silly as not to put in block letters. The outside dimensions of the bottle were such that to blow a bottle of the capacity required meant the use of a very much larger quantity of glass than should have been required. Judge Snagge said that, in his opinion, the directions for the making of the moulds were not explicit enough, and therefore the plaintiff was entitled to recover. Judgment was accordingly entered for £11 12s., with costs.

**Chemical Works Accident.**—An application was made, under the Workmen's Compensation Act, for the loss of the sight of an eye, in the Bow County Court, on June 28, before Judge Graham, K.C. The applicant, Geo. Gibbard, Folkestone Road, West Ham, a labourer, asked for an award against Thos. Tyrer & Co., Ltd., Stirling Chemical Works, Abbey Mills, Stratford, chemical manufacturers. Mr. Bull stated that applicant was engaged as a counter-hand to pack chemicals, and to assist generally to load the vans. On April 12 a man was breaking up a frame, and got a chisel wedged. Applicant asked for a hammer and struck the chisel, and a piece of steel went into his eye. At the time he did not realise the matter was very serious, but he reported the accident to the foreman. At night his eye was painful, so he went to the West Ham Hospital and was treated for three days, returning on April 15 to work. He then went right on till July 2, when his eye was so bad that he went to the Moorfields Eye Hospital, and was there treated until July 25, when he resumed work. Again he went on till November 8, when he had a piece of steel removed from his eye. The treatment lasted until the December, but when he went back he was given a week's notice, and the same day his union put in a claim under the Workmen's Compensation Act. The eye is for all practical purposes useless now. Judge Graham asked what the defence was, and was told it was on three grounds—that no notice of the accident was given in time, in accordance with the requirements of the Act; that he was a counter-hand, and not a labourer; and that the accident did not arise out of, or in the course of, his employment. Mr. Bull said he hoped to show that this was one of the cases where the delay was reasonable. The applicant, in cross-examination, astonished the Court by saying that until his union put in the claim he had no idea that he could have claimed anything. It is a rule of Messrs. Tyrer that anyone should help another, if in trouble. For the respondents evidence was given that there is no rule that any employee should exceed his duties and help anyone else, and therefore the applicant's act was voluntary. Judgment was reserved. Giving judgment on July 11, Judge Graham decided that the accident was one occurring within the scope of the applicant's work. He was, therefore, entitled to 35s. weekly for the period he was attending the hospitals, and £1 weekly from now for partial incapacity; in all, £44 0s. 10d. Judgment was entered accordingly, with costs.

## Bankruptcy Reports

**Re Daniel William Mason,** Mason's Cash Drug Stores, 175, Parc Road, Cwmparc, Glamorganshire. The first meeting of the creditors of the above was held recently at 34, Park Place, Cardiff. The statement of affairs showed ranking liabilities of £772 15s. 8d., against assets of £144 8s. 9d., or a deficiency of £628 6s. 11d. Debtor attributed his failure to depression in trade and the slump in prices. The matter was left in the hands of the Official Receiver as trustee of the estate.

**Re Alfonso Carreras and Enrique Carreras,** 31, Finchley Road, London, N.W., manufacturers of "Enolin." Mr. W. P. Bowyer presided on July 10 at the London Bankruptcy Court at the meeting of creditors under this failure. Separate receiving orders were made against the debtors (see below), but the proceedings have been consolidated. A solicitor for the debtors asked for an adjournment with a view to offering a substantial proposal to the creditors. He said he could not give details of the proposition at the moment, but negotiations were on foot which would no doubt be successful, and there would be sufficient funds forthcoming to pay a good dividend. The Chairman reported that the debtors estimated their joint liabilities at £20,000, and as to assets, which consisted of the Enolin tooth paste business, of which they were the sole proprietors, they were of opinion that if sold as a going concern it would realise a considerable sum. The failure was attributed to general financial depression and loss on a cinema undertaking. Mr. Harroway, on behalf of creditors, supported the motion for adjournment, and by consent the meeting was adjourned for one month.

**Re Enrique Carreras,** 31, Finchley Road, N.W., and the Regent Palace Hotel, London, W.—The first meeting of creditors was held on July 4 at the London Bankruptcy Court, under the failure of this debtor, who was a director of the Theatre Royal Cinema (Manchester) Ltd., and was also in business in partnership with his brother, Alfonso Carreras, as manufacturers of "Enolin" tooth-paste at King Street, Hammersmith. According to the debtor's statements, a Spaniard by birth, he came to this country in 1903. In 1918 the debtor and his brother commenced business in partnership to manufacture toilet preparations, under the style of A. & E. Carreras, at Hammersmith. The main business was manufacturing "Enolin" tooth-paste, and each partner provided £1,000 as capital. In January 1919 A. & E. Carreras, Ltd., was formed with a nominal capital of £100,000 to take over the interest of the partners in that business, and also in a cinema business with which they were also associated. The company was a great success until the end of 1920, when, owing to differences, there was a split, the tooth-paste business remaining in the hands of the debtor and his brother as their sole property. Early in 1921 they embarked on a huge advertising scheme in connection with the "Enolin" tooth-paste, the cost running into £25,000. It was a prize advertising scheme, and for the prizes about £7,000 of the above sum was spent. The debtor regarded his interest in the business as of considerable value, and he attributed his position to liabilities in connection with the Manchester Cinema Theatre and to general financial depression. The joint liabilities of the debtor and his brother are estimated at £20,000. Mr. W. P. Bowyer, Senior Official Receiver, suggested that as Mr. Alfonso Carreras was also in the Court and a consolidation order had been made over the two estates, this meeting should be adjourned till October 10, when the first meeting of the creditors of that debtor would be held. The meeting was adjourned accordingly.

## Deed of Arrangement

**Skeat, Charles,** 609, High Road, Tottenham, chemist and druggist.—Among the creditors are: Edward Cook & Co., Ltd., £20; Houghtons, Ltd., £10; Hedley Ryals & Co., £10; Marshall & Co., £10; S. Maw, Son & Sons, Ltd., £30; Evans Sons Lescher & Webb, Ltd., £35; Wyleys & Co., £145; Turner Drug Co., £34; A. E. Stevens, £40.



## New Companies and Company News

P.C. means Private Company and R.O. Registered Office

**BONO CO., LTD. (P.C.).**—Capital, £5,000. Objects: To take over the business of an insecticide manufacturer and exterminating contractor carried on by H. C. Kenney at 12 Clarges Street, W., as the "Bono Co." R.O.: 12 Clarges Street, Mayfair, London, W. 1.

**H. N. DICKINSON, LTD. (P.C.).**—Capital £500. Objects: To carry on the business of manufacturing and/or dispensing chemists, druggists, drysalter, oil and colourmen, etc. The first directors are:—H. N. Dickinson and Mrs. D. G. Dickinson, 128 Dumbreck Road, Eltham. R.O.: 3 Station Parade, Westmount Road, Shooters Hill, Eltham.

**BRITEX CHEMICAL PRODUCTS, LTD. (P.C.).**—Capital, £14,000. Objects: To adopt an agreement with the Britex Chemical Products, Ltd., and the liquidator, and to carry on the business of manufacturers of and dealers in disinfectants, surgical and other antiseptics, dressings, ointments, deodorants, lotions, pharmaceutical and cosmetic preparations, etc. R.O.: 26 Audrey House, Ely Place, London, E.C.

**H. GORDON (LONDON), LTD. (P.C.).**—Capital, £5,000. Objects: To take over the business of druggists' and chemists' sundriesmen and india rubber manufacturers, snippers and general merchant carried on at 8, City Road, E.C., as "H. Gordon, Ltd." The first directors are: H. Gordon, 35, Feignmouth Road, Cricklewood, and H. T. Eddrup, 74, Eastern Road, Romford. R.O.: 8 City Road, London, E.C.

**PHILDES PRODUCTS CO., LTD. (P.C.).**—Capital, £1,000. Objects: To acquire the business carried on at 19, Devereux Court, Strand, W.C., as the "Philides Products Co.," to adopt an agreement with R. H. Jackson and to carry on the business of general merchants and agents, manufacturers of chemical, pharmaceutical, surgical, toilet and perfumery preparations, etc. The first directors are:—R. H. Jackson, 3, Essex Court, Temple, E.C.4, G. Hancian, 105, Rue La Fayette, Paris, and Mrs. W. O'Connor, 2, Cavendish Mansions, Langham Street, S.W. R.O.: 19 Devereux Court, Strand, London, W.C.

**COLOMBO APOTHECARIES CO., LTD.**—The accounts for the year ending March 31, 1922, state that, after writing Rs. 15,455.13 off fittings and furniture and Rs. 190.71 off buildings for depreciation, placing Rs. 15,000 to reserve for bad and doubtful debts and discounts, and Rs. 8,785.92 to the reserve against depreciation of plant, and adding Rs. 50,000 to the reserve against depreciation of stock in trade and Rs. 5,203.11 to the reserve against employees' leave allowances, there will be an available balance of Rs. 81,692.87. The directors recommend that a dividend of 10 per cent. on the paid-up capital of the company be declared, leaving a balance of Rs. 21,692.87 to be carried forward.

**APOLLINARIS AND JOHANNIS, LTD.**—The net profit for the year ended March 31 was £15,153, after paying in cash £10,710 for interest on Debenture interest certificates for year, reducing debit of profit and loss to £199,185. All advertising expenditure, both home and foreign, together with usual amounts for depreciation, have also been written off. Sales showed increase on last year's total, and are of encouraging character, but profits have been kept down by reason of high cost of indispensable raw materials, which the company was compelled to buy when commodities were scarce and dear. Adverse effects of these high costs on future profits will tend to disappear as remaining stocks of raw materials are gradually replaced by materials purchased at lower prices now ruling. Export business continues to suffer very severely from restricted trade and prohibitory import duties in many non-European countries. Capital suspense account in connection with shares held in Owens European Bottle Machine Company, of Toledo, remains at £108,349.

**SAPON SOAPS, LTD.**—In response to a circular letter issued by the company a conference of the creditors was held recently at the Cannon Street Hotel, London, E.C. The chairman of the company presided, and stated that the directors became aware last autumn that the financial position was very unsatisfactory. The company produced a good article, but the board gradually came to the conclusion that the management had been deficient, coupled with the difficulties which had arisen through the troublesome times which had been encountered. The directors decided to accept a suggestion and transfer the business to Liverpool, where it would be under the management of a well-known firm of soap makers, but finally the arrangement fell through. It became more and more difficult to carry on, and the directors found that further capital could not be obtained. The total liabilities of the company were about £63,000, of which £31,422 was owing on debentures. There were general creditors for £9,807 and contingent claims for £13,437. The latter included about £12,000 owing to an agent in America in connection with a company started in New York some two or three years ago for the purpose of taking over a syndicate started there previously in order to sell the products in America and test the market with a view to the disposal of the American rights. There were also special creditors for £1,799, which amount included a commission of £500 in connection with the sale of the Russian patents. That sale was partly completed some years ago, but a completion was now practically impossible. There were also creditors for £1,538 in connection with the reinstatement of the works buildings in consequence of a fire last December. The amount mentioned had been received from the insurance company and was held in the name of the company and other interested parties. With regard to the first debentures, these were held by the bank for £25,000 odd, in respect of money advanced early last year. He (the chairman) held a second debenture for £6,000 for money advanced in October, 1921, when the company was suddenly faced with a disagreeable situation in New York. With regard to the tangible assets, he was afraid they were small, and included the freehold premises at Edinburgh, which were purchased for about £4,000. It was impossible to say what the goodwill was worth or what the other assets would produce. A scheme of drastic reconstruction had been suggested and the principal shareholders were consulted, but owing to the company's liabilities there was practically no support for the scheme. The bank had appointed a receiver. He was unable to put any definite proposal before the creditors, but the directors would do the best they could for all concerned. Mr. P. Houstoun inquired what figures appeared in the company's last balance sheet, and the chairman said that the patents account had stood at £132,495. What the realisable value of the patents was he could not say. The other assets in the balance sheet were formation expenses £12,800; commissions £32,000; goodwill £10,000; advertising expenses (capitalised) £60,737; lease at Cubitt Town £675; buildings £773; plant and machinery £11,020; furniture, etc., £564; motor vans £470; investment in subsidiary company in New York £33,342; subsidiary company in Canada £6,669; Edinburgh premises £4,273; book debts £4,409; balance of Russian deal £2,500; amount deposited on account of reinstatement of buildings £1,525; stock £8,466; stock of advertising material £934; and cash at bank and in hand £491. In answer to a question the receiver (Mr. Dexter) said the bank did not desire to do anything drastic, but would help as far as possible, and the business was being continued. During the discussion which ensued it was stated that certain creditors had been pressing, and writs issued, but only one judgment had been obtained against the company. The chairman said he had put the position frankly before the creditors, and he suggested that they should leave the matter in his hands, and he would work in consultation with the receiver. A suggestion was made that a committee of the principal creditors should be appointed to work with the directors in the preparation of a scheme, and the chairman said he welcomed the suggestion and would be glad to consult the principal creditors. The creditors include Brunner, Mond & Co., Ltd., £342.



# The New Pharmacopœia of Japan

## II.

In the Special Number (June 24, p. 150) we commenced a review of the new Japanese Pharmacopœia, dealing with the general features and the specific features of the work. The notes on the monographs and comparison with those of the British Pharmacopœia are now continued:—

**GALLAE.**—Gobaishi. Japanese Galls.—Vesicular excrescences produced on the leaves of *Rhus javanica*, Lin., by the punctures of *Schlechtendalia chinensis*, J. Bell.

**GELATINA ALBA.**—Gelatin.—Dissolve 5 grams of gelatin in 30 c.c. of water in about 150 c.c. flask by warming on a water bath, add 5 grams of phosphoric acid (20 per cent.), close the flask with a cork stopper, to which a wet potassium iodate and starch paper is attached, and heat it on a water bath under frequent agitation; the paper should not be turned blue within 15 minutes. On incineration, 5 grams of gelatin should leave not more than 0.1 gram of solid residue. Dissolve the residue in 2 c.c. of diluted hydrochloric acid, and then oversaturate it with solution of ammonia; it should produce no blue colour.

**GLYCERINUM.**—Glycerin.—Sp. gr. 1.225 to 1.235 (1.260). Add to 50 c.c. of glycerin 50 c.c. of water, freshly boiled and cooled, and 10 c.c. of N/10 solution of potassium hydroxide, warm the mixture for 15 minutes on a water bath, and, when cooled, add 1 c.c. of phenolphthalein solution; the resulting mixture should require for decolorisation at least 4 c.c. of N/10 hydrochloric acid.

**GOSYPIUM DEPURATUM.**—Purified cotton.—An infusion, prepared by extracting 1 part of purified cotton with 10 parts of boiling water, should produce no more than an opalescence with silver nitrate solution, barium nitrate solution, or with ammonium oxalate solution. A mixture of 10 c.c. of the same infusion, 2 to 3 drops of sulphuric acid and 3 drops of potassium permanganate solution (1:1000) should not lose its colour within 2 to 3 minutes. On incineration it should leave not more than 0.3 per cent. of solid residue (0.5 per cent.).

**GUAIACOLUM.**—Guaiacol.—Sp. gr. 1.120 to 1.143 (1.16-1.20). B.p. about 205 deg. (distils between 200 deg. and 205 deg.). One c.c. of guaiacol should mix clearly with 2 c.c. of sodium hydroxide solution (15 per cent.), and on diluting the mixture with 30 c.c. of water (B.P. stipulates 25 c.c. of water), it should remain clear and nearly colourless. A mixture of 1 volume of guaiacol and 2 volumes of potassium hydroxide solution (15 per cent.) should solidify, after a short time, to a white, crystalline mass.

**GUAIACOLUM CARBONICUM.**—Guaiacol carbonate.—M.p. about 88 deg. (85 deg. to 88 deg.). Shake 1 gram of guaiacol carbonate with 10 c.c. of water, and filter; the filtrate, when acidified with nitric acid, should not be affected by silver solution. 0.1 gram of guaiacol carbonate should dissolve almost colourlessly in 1 c.c. of sulphuric acid.

**HERBA SWERTIÆ.**—Toyaku—Japanese chiretta.—The herbs of *Swertia japonica*, Makino, and *Swertia chinensis*, Hemsl., collected when in flower and dried.

**HEXAMETHYLENTETRAMINUM.**—Hexamethylenetetramine.—Boil an aqueous solution (1:20) of hexamethylenetetramine with Nessler's reagent; neither coloration nor turbidity should be produced.

**HYDRARGYRUM.**—Mercury.—Sp. gr. 13.56. It should dissolve completely in nitric acid, and should contain no moisture.

**HYDRARGYRUM BICHLORATUM.**—Mercuric chloride.—Soluble in 16 (13) parts of water, 3 parts of boiling water, 3 (4) parts of alcohol, and in about 17 parts of ether.

**HYDRARGYRUM SALICYLATUM.**—Mercuric salicylate.—Dissolve 0.3 gram of mercuric salicylate in a small quantity of diluted hydroxide solution, just sufficient to dissolve it, slightly acidify the solution with diluted acetic acid, then add 25 c.c. N/10 iodine volumetric solution, and set aside for 3 hours at ordinary temperature, well stoppered and with frequent shaking; not more than 8.6 c.c. of N/10 sodium thiosulphate volumetric solution should be required to discharge the colour of the mixture (Indicator: starch solution).

**JODOFORMIUM.**—Iodoform.—Soluble in about 80 (100) parts of alcohol, 10 parts of boiling alcohol, and in about 8 parts of ether. Melting point about 120 deg.

**JODUM.**—Iodine.—Required to contain not less than 99 per cent. of pure iodine. Shake 0.5 gram of iodine, in coarse powder, with 20 c.c. of water, and filter. Gently warm a portion of the filtrate, after decolorising it with sulphurous

acid solution, with a small piece of ferrous sulphate, 1 drop of ferric chloride solution (1:10), and a small quantity of sodium hydroxide solution, and, after cooling, add an excess of hydrochloric acid; no blue colour should be produced. Add an excess of solution of ammonia to another portion of the filtrate, then an excess of silver nitrate solution, until a complete precipitation takes place, and filter; the filtrate, on the addition of an excess of nitric acid, may become merely turbid, but should produce no precipitate. The remaining portion of the same filtrate should produce no change with barium nitrate solution.

**KALIUM BICARBONICUM.**—Potassium bicarbonate.—Should contain not less than 99.6 per cent. (99 per cent.) of pure potassium bicarbonate. Dissolve 2 grams of the salt, previously dried over sulphuric acid, in water to make the solution measure 50 c.c.; 25 c.c. of the solution should require for neutralisation 10 c.c. of normal hydrochloric acid volumetric solution (Indicator: methyl orange solution). When heated strongly it should acquire no black colour, and should leave 69 per cent. of solid residue.

**KALIUM BITARTARICUM.**—Cream of tartar.—The salt contains not less than 97.8 per cent. (99 per cent.) of pure potassium bitartrate. Add 5 c.c. of acetic acid (50 per cent.) to 1 gram of the salt, allow the mixture to stand for 30 minutes with frequent shaking then add 25 c.c. of water and allow it to settle; the clear, supernatant liquid should not be affected by the addition of 8 drops of ammonium oxalate solution (1:25) within 1 minute. Dissolve 1 gram of the powdered salt, dried at 100 deg., in 25 c.c. of boiling water; the resulting solution should require for neutralisation at least 5.2 c.c. of normal potassium hydroxide volumetric solution (Indicator: phenolphthalein solution).

**KALIUM CARBONICUM.**—Potassium carbonate.—Required to contain not less than 94.6 per cent. (81.5 per cent.) of pure potassium carbonate. Twenty c.c. of an aqueous solution (1:20) of the salt, supersaturated with hydrochloric acid, should not be coloured blue by the addition of 0.5 c.c. of potassium ferrocyanide solution (1:20). Ten c.c. of an aqueous solution (1:10) of the salt, supersaturated with diluted sulphuric acid, should decolorise not more than 5 c.c. of potassium permanganate solution (1:1000). The solution obtained by dissolving 1 gram of the salt in 50 c.c. of water should require for neutralisation at least 13.7 c.c. of normal hydrochloric acid volumetric solution (Indicator: methyl orange solution).

**KALIUM CARBONICUM CRUDUM.**—Crude potassium carbonate.—Required to contain not less than 89.8 per cent. of pure potassium carbonate.

**KALIUM IODATUM.**—Potassium iodide.—Dissolve 0.2 gram of the salt in 2 c.c. of solution of ammonia, add, under shaking, 13 c.c. of N/10 silver nitrate solution and then filter; the filtrate, when supersaturated with nitric acid, should neither become turbid nor be coloured dark within 10 minutes.

**KALIUM PERMANGANICUM.**—Potassium permanganate.—Soluble in 16 (20) parts of water, and in 3 parts of boiling water.

**KREOSOTUM.**—Creosote.—Add 2 c.c. of petroleum benzin to 1 c.c. of creosote, shake the resulting clear solution with 2 c.c. of saturated baryta water, which has been freshly prepared, and allow the mixture to settle; the upper layer should not be coloured blue or dirty brown, and the under layer should not be coloured red.

**LIQUOR CRESOLI SAPONATUS.**—Compound solution of cresol.—

Linseed oil	120 parts.
Potassium hydroxide	27 "
Alcohol (90 per cent.)	12 "
Water	41 "
Crude cresol	200 "

Mix the linseed oil with a mixture of potassium hydroxide, alcohol and water, allow the mixture to stand at ordinary temperature with frequent stirring, and, when the oil has completely saponified, dissolve the crude cresol in the resulting liquid.

Sp. gr. 1.038 to 1.041.

Introduce 20 c.c. of the solution into a flask, dilute it with 60 c.c. of water, add to it 2 to 3 drops of methyl orange solution, and then add diluted sulphuric acid, drop by drop, until it acquires a slightly red colour. Distil the resulting mixture with steam until the distillate evolves no odour of cresol, vigorously shake it with 20 grams of sodium chloride and 80 c.c. of ether, and set it aside. Separate the clear ethereal solution, remove the ether by distillation, and dry the residue for 40 minutes at 100 deg.; the residue should weigh at least 10 grams. The cresol here separated should conform to the tests for identity and purity under Cresolum crudum.



**LIQUOR GELATINAE STERILISATUS.**—Sterilised solution of gelatin.

Gelatin ... ..	10 parts.
Sodium chloride ... ..	0.5 "
Distilled water ... ..	90 "

Dissolve gelatin and sodium chloride in distilled water by warming, neutralise the solution with sodium carbonate solution, and filter. Introduce 10 to 40 c.c. of the filtrate into hard glass tubes, fuse, and sterilise them thrice, each time for 15 minutes, and at intervals of 24 hours, in a steam bath held at a temperature of 100 deg. Inscribe the name of the laboratory, the volume of the contents of each tube, and the number and date of the test on the labels, seal, and pack them.

A colourless, or slightly yellowish, clear, thick liquid, without odour, showing a neutral reaction, congealing at about 12 deg., and melting at 25 deg. The solution should be clear, and show no change, on standing at a temperature of 37 deg. for 7 days. The solution should be sterile when tested by aerobic and anaerobic cultivation, using not less than 2 c.c. of the solution for each test. Ten c.c. of the solution, when injected subcutaneously into a guinea-pig (*Cavia cavya*, Schreb., *Cavia porcellus*, Lin.), should be harmless.

**LIQUOR HYDROGENII PEROXYDATI.**—Solution of hydrogen peroxide. Required to contain not less than 3 per cent. of hydrogen peroxide. Add N/10 potassium hydroxide volumetric solution, drop by drop, to 50 c.c. of the solution; not more than 3 c.c. of volumetric solution should be required for neutralisation (Indicator: phenolphthalein solution). Twenty c.c. of solution, when evaporated on a water bath, should leave not more than 0.02 gram of solid residue (B.P.: 1 per cent.). Add water to 10 grams of the solution to make it measure 100 c.c.; 10 c.c. of the diluted solution, when mixed with 5 c.c. of diluted sulphuric acid and 10 c.c. of potassium iodide solution (1:10), and then allowed to stand for 30 minutes in a well-closed flask, should require at least 17.7 c.c. of N/10 sodium thiosulphate volumetric solution to combine the iodine set free (Indicator: starch solution).

**LIQUOR KALII CAUSTICI.**—Solution of potassium hydroxide. Contains about 15 per cent. of pure potassium hydroxide.

**LIQUOR NATRII CHLORATI PHYSIOLOGICA.**—Physiological solution of sodium chloride. Physiological salt solution.

Sodium chloride ... ..	8.5 grams.
Distilled water ... ..	1000 "

**LIQUOR RINGERI.**—Ringer's solution.

Sodium chloride ... ..	8 grams.
Calcium chloride ... ..	0.1 gram.
Potassium chloride ... ..	0.075 "
Sodium bicarbonate ... ..	0.1 "
Distilled water ... ..	1000 grams.

**LITHIUM CARBONICUM.**—Lithium carbonate.—0.5 gram of the salt, previously dried at 100 deg., should require for neutralisation at least 13.4 c.c. of normal hydrochloric acid volumetric solution (Indicator: methyl orange solution).

**MAGNESIUM SULFURICUM.**—Magnesium sulphate.—Triturate 2 grams of the salt with 2 grams of burnt marble, previously disintegrated with a small quantity of water, pour a mixture of 10 c.c. each of alcohol and water, and set aside for 2 hours with frequent shaking. Then add 40 c.c. of absolute alcohol, and filter; 20 c.c. of the filtrate should acquire, on the addition of 2 c.c. of turmeric tincture, no reddish-brown coloration.

**MEL DEPURATUM.**—Purified honey.

Honey ... ..	40 parts.
Distilled water ... ..	60 "
White bole, previously freed from iron compounds by treating with hydrochloric acid ... ..	3 "

Mix them, heat on a water bath for 30 minutes, and allow the mixture to settle. Then filter the warm liquid, and evaporate as quickly as possible on a water bath to make its sp. gr. 1.33.

Ten grams of purified honey, diluted with 5 times its volume of water, should require for neutralisation not more than 0.4 c.c. of normal potassium hydroxide volumetric solution (Indicator: phenolphthalein solution). On incineration it should leave not more than 0.4 per cent. of solid residue.

**MENTHOLUM.**—Menthol.—M.p. about 43° (42° to 43°). One part of menthol, when mixed with 40 parts of sulphuric acid, should produce a turbid, brownish-red liquid, which, after 24 hours, separates a clear, colourless oily layer having no odour of menthol. Add menthol to a mixture of 1 c.c. of glacial acetic acid, 6 drops of sulphuric acid, and 1 drop of nitric acid; no coloration should be produced. When evaporated on a water bath, menthol should leave not more than 0.1 per cent. of solid residue.

**MORPHINUM HYDROCHLORICUM.**—Morphine hydrochloride.—To sulphuric acid add a mixture of 1 part of the salt and 4 parts of sugar; a red colour is produced, which becomes distinct on the further addition of 1 drop of bromine water. Triturate a small crystal of the salt with sulphuric acid containing in each c.c. 1 drop of formalin; a red colour is produced, which changes after a short time to purple and then to blue. When dried at 100 deg., the salt should lose not more than 14.4 per cent. of its weight (B.P.: about 14 per cent.), and the dried salt should be pure white, or very faintly yellowish.

**MORPHINUM SULFURICUM.**—Morphine sulphate.—When dried at 130°, the salt should lose not more than 11.9 per cent. of its weight.

**MYRRHA.**—Myrrh.—On incineration, it should leave not more than 6 per cent. of solid residue (5 per cent.).

**NATRIUM BICARBONICUM.**—Sodium bicarbonate.—An aqueous solution (1:50) of the salt, acidified with nitric acid, should remain clear, and should produce with silver nitrate solution no more than an opalescence after 10 minutes; the same aqueous solution should produce no red colour with ferric chloride solution.

Dissolve 1 gram of the salt, without strongly shaking, in 20 c.c. of water, at a temperature not above 15°, and add 3 drops of phenolphthalein solution; a red colour should not appear immediately, and in case when a slightly red coloration is produced, it should disappear by the addition of 0.2 c.c. of normal hydrochloric acid volumetric solution.

When heated to redness, the salt previously dried over sulphuric acid, should leave not more than 63.8 per cent. of solid residue.

**NATRIUM BROMATUM.**—Sodium bromide.—Soluble in 1.2 (1.5) parts of water and 10 (16) parts of alcohol. Required to contain not less than 94.3 per cent. (99 per cent.) of pure sodium bromide. When dried at 100° it should lose not more than 5 per cent. of its weight.

Dissolve 3 grams of the salt, dried at 100 deg., in water to make the solution measure 100 c.c.; 10 c.c. of the resulting solution, after being mixed with 1 to 2 drops of potassium chromate solution (1:20), should require, in order to produce a permanent red colour, not more than 29.3 c.c. of N/10 silver nitrate volumetric solution.

**NATRIUM CARBONICUM.**—Sodium carbonate.—Soluble in 1.6 (2) parts of water, and in 0.2 parts of boiling water. Required to contain not less than 37 per cent. of pure (anhydrous) sodium carbonate. 1 gram of the salt, dissolved in 50 c.c. of water, should require for neutralisation at least 7 c.c. of normal hydrochloric acid volumetric solution. (Indicator: methyl orange solution.)

**NATRIUM CARBONICUM CRUDUM.**—Crude sodium carbonate.—Required to contain not less than 34.5 per cent. of pure (anhydrous) sodium carbonate. 1 gram of the salt, dissolved in 50 c.c. of water, should require for neutralisation at least 6.5 c.c. of normal hydrochloric acid volumetric solution (Indicator: methyl orange solution).

**NATRIUM CARBONICUM SICCUM.**—Exsiccated sodium carbonate.—Required to contain not less than 74 per cent. (95 per cent.) of pure sodium carbonate.

**FIXED OILS.**—The constants indicated in the case of the official fixed oils are collated in the following table, the corresponding requirements of the British Pharmacopoeia being included in parentheses under the corresponding Japanese index:—

	Specific gravity.	Iodine value.	Saponification value.	Acid value (limit)
OLEUM AMYGDALARUM (Almond Oil) ..	0.915-0.920 (0.915-0.920)	93-100 (93-100)	—	—
OLEUM ARACHIDIS (Arachis oil) ..	0.916-0.921 (0.916-0.921)	83-100 (83-101)	188-196.6 (190-196)	7.5 (6)
OLEUM CACAO (Oil of Theobroma) ..	—	34-38 (35.5-37.5)	—	5 (2)
OLEUM CROTONIS (Croton oil) ..	0.94-0.96 (0.940-0.960)	—	—	—
OLEUM JECORIS (Cod liver oil) ..	0.924-0.931 (0.920-0.930)	140-180 (155-173)	163-190 (179-192)	3 (2.5)
OLEUM LINI (Linseed oil) ..	0.93-0.94 (0.930-0.940)	170-190 (+170)	—	3 (3)
OLEUM OLIVARUM (Olive oil) ..	0.915-0.920 (0.915-0.918)	80-88 (79-87)	189-199 (188-197)	8 (6)
OLEUM RICINI (Castor oil) ..	0.95-0.97 (0.958-0.970)	—	—	—
OLEUM SESAMI (Sesame oil) ..	0.915-0.926 (0.921-0.924)	103-114 (103-114)	186-193 (189-193)	—

**OLEUM AMYGDALARUM.**—Almond oil.—

Mix 10 c.c. of the oil with 15 c.c. of sodium hydroxide solution (15 per cent.) and 10 c.c. of alcohol, allow the mixture to stand at 35 deg. to 40 deg. until it becomes clear,



and dilute it with 100 c.c. of water; a clear solution should be obtained. Add an excess of hydrochloric acid to the solution, separate the oily liquid, wash it with warm water, and allow it to clarify by heating on a water bath; it should remain in an oily state at 15 deg. 1 volume of the liquid should dissolve clearly in 1 volume of alcohol, and the solution should deposit no fatty acid if cooled to 15 deg., nor should it become turbid upon further dilution with 1 volume of alcohol.

**OLEUM HYDNOCARPAE.**—Hydnocarpus oil.—A fixed oil obtained by expression from the peeled seeds of *Hydnocarpus*. A whitish or yellowish, ointment-like mass, having a faint characteristic odour and a characteristic, fat-like, not acrid taste. At 22° to 23°, the oil almost completely liquefies, and at 25° to 30° it melts completely to a clear liquid. Iodine value: 80-90. Saponification value: 195-215. Acidity: not less than 7.

Dissolve 5 grams of the oil in pure chloroform to make it measure 100 c.c. at ordinary temperature; optical rotation ( $\alpha$  d 20°) of the solution is about + 2.4 deg. Add 1 drop of sulphuric acid to 5 c.c. of a chloroform solution (1:10) of the oil and shake; a beautiful green colour is produced after a short time. Add 5 drops of a mixture of 1 gram of trichloroacetic acid and 4 drops of hydrochloric acid to 10 drops of the oil, and warm gently; a deep blue colour should be produced. Warm the oil with 5 times its volume of absolute alcohol; a clear solution should be obtained, which deposits a white, crystalline precipitate at ordinary temperature.

**OLEUM JECORIS.**—Cod-liver oil.—Is described as a fixed oil obtained from the livers of *Gadus macrocephalus*, Tilesius, and of *Pollachius Brandti*, Jordan et Snyder.

**OLEUM LINI.**—Linseed oil.—

Ignite a string of twisted paper, moistened with the oil, and blow out; it should emit no odour resembling burning animal fat. Shake 1 c.c. of the oil with 5 c.c. of diluted acetic acid (6 per cent.), and filter; the filtrate, after the addition of 5 c.c. of alcohol, should yield, on passing hydrogen sulphide, no precipitate after 3 hours.

**OLEUM PRUNI ARMENTIAE.**—Apricot kernel oil.—Sp. gr. 0.91 to 0.92. Saponification value: 205-215. Iodine value: 96-106.

**OLEUM TSUBAKI.**—Tsubaki oil.—A fixed oil, obtained by expression from the husked seeds of *Camellia japonica*, Lin. A clear, colourless or pale yellowish liquid, having little odour and a bland taste, free from rancidity. The oil congeals partly at -10 deg., and completely at -15 deg. Sp. gr.: 0.915. Iodine value: 80-82. Saponification value: 189-192.6.

Add 10 c.c. of a cold mixture of equal parts of fuming nitric acid, sulphuric acid and water to 2 c.c. of the oil, so as to form two layers of liquids; after a short time a beautiful, bluish-green zone is produced at the line of contact. Mix 20 drops of the oil with 1 drop of sulphuric acid; the mixture acquires a pale yellow colour, changing afterwards to dark yellow or brown. Shake 5 c.c. of the oil with an equal volume of hydrochloric acid, then add 0.5 gram of white sugar, and shake again; no pink colour should be produced. Vigorously shake 2 c.c. of the oil with a mixture of 1 c.c. each of fuming nitric acid and water at a temperature not exceeding 10 deg.; after standing for two hours it should congeal completely. Mix 5 c.c. of the oil with 5 c.c. each of amyl alcohol and carbon disulphide, which contains 1 per cent. of sulphur in solution, and heat under a reflux condenser in a water bath for 15 minutes; the mixture should produce no red colour. Again add 5 c.c. of carbon disulphide solution (1:100) of sulphur, and heat for further 15 minutes; no reddish colour should be produced.

**NATRIUM IODATUM.**—Sodium iodide.—Required to contain not less than 95 per cent. of pure sodium iodide. When dried at 100°, the salt should not lose more than 5 per cent. of its weight.

Dissolve 0.2 gram of the dried salt in 2 c.c. of solution of ammonia, add 14 c.c. of N/10 silver nitrate volumetric solution under agitation, and filter; the filtrate, supersaturated with nitric acid, should neither be rendered turbid, nor be coloured within 10 minutes.

**NATRIUM PHOSPHORICUM.**—Sodium phosphate.—The salt fuses at 40°. On heating 1 gram of the salt to redness, 0.37 to 0.38 gram of a white residue should be obtained.

**NATRIUM SALICYLICUM.**—Sodium salicylate.—Heat 1 gram of the salt slightly, and extract the residue with boiling water; the resulting solution should require for neutralisation at least 12.4 c.c. of N/2 hydrochloric acid volumetric solution (Indicator: methyl orange solution).

To be continued.

## "B.H.D." Annual Sports

On July 8, about five hundred of the employees of The British Drug Houses, Ltd., assembled for the second annual sports meeting, held at the King's Oak Sports Ground, High Beech, Loughton. The weather was dull, but fortunately there was no rain. Mr. C. A. Hill amiably officiated as referee, and the judges were Messrs. R. K. Harvey, R. R. Bennett, F. C. Oscar Shaw, A. Fraucis, C. M. Hill, H. C. Collins, E. Sibley, H. Martin and P. C. Jinks. Thirty events were decided, commencing at 11.15 a.m., with the following results:—

**100-yards Handicap:** (1) F. C. Hymas; (2) G. Dabbs; (3) W. Fuller.

**80-yards Egg and Spoon:** (1) W. Read; (2) L. Mallett; (3) R. Linton.

**100-yards (Boys):** (1) R. Gordon; (2) J. Shillibeer; (3) E. Coulson.

**200-yards Handicap:** (1) G. Garman; (2) C. P. Kilgallin; (3) H. C. P. Lake.

**80-yards Ladies' Level:** (1) S. Robertson; (2) R. Flack; (3) B. Parsons.

**High Jump:** (1) G. Cardew; (2) F. C. Hymas; (3) H. Lee.

**440-yards Handicap:** (1) W. E. Jones; (2) C. Padman; (3) G. R. Dutton.

**1-mile Dept. Relay:** (1) Office; (2) A1; (3) Analytical.

**80-yards Skipping:** (1) A. Piercy; (2) D. Fuller; (3) S. Robertson.

**100-yards Veterans:** (1) W. Hammond; (2) G. Dyer; (3) J. Baxter.

**880-yards Handicap:** (1) W. F. Bargery; (2) R. Goodard; (3) C. Roberts.

**300-yards Ladies' Relay:** (1) Bunhill Row.

**Obstacle Race:** (1) R. Pratt; (2) G. Garman; (3) H. Lake.

**Ladies' Potato Race:** (1) A. Piercy; (2) S. Robertson; (3) R. Boon.

**120-yards Hurdle:** (1) G. Dabbs; (2) G. R. Dutton; (3) W. Herbert.

**1-mile Handicap:** (1) F. Branscomb; (2) G. Walker; (3) G. Padman.

**Sack Race:** (1) A. J. T. Musgrove; (2) F. Simmons; (3) C. Padman.

**Three-legged Race:** (1) C. Padman and A. Mayes; (2) F. Simmons and W. Fuller; (3) F. Monk and E. Toombs.

**Half-mile Walking Handicap:** (1) T. H. Dewdney; (2) I. C. P. Smith; (3) Eric Elder.

**Tug-of-War:** (1) Builders.

Throughout the afternoon and evening the North London Excelsior Silver Prize Band rendered selections. Tea was served by the Company at 4.30, and immediately afterwards Mr. C. A. Hill presented eighty handsome prizes to the winners, and after the presentation he gave an appropriate speech. A dance took place in the large hall after the presentation of the prizes, and in this a large number participated, thus concluding an enjoyable day.

## College Notes

"THE SQUARE CHRONICLE."

THE June number of "The Square Chronicle" contains an *in memoriam* article on the late Mr. C. T. Allen, Ph.C., whose early death will long be lamented in pharmacy. A large proportion of the remaining space is devoted to sport, and the balance is filled with topical paragraphs and short articles. The humorous illustrations of B. E. Kent are a salient feature.

SWANSEA AND WEST WALES COLLEGE OF PHARMACY.

ON July 7, the book prizes given by Mr. F. D. Phillips, J.P., Haverfordwest, Mr. H. S. Arnold, Cwmavon, Mr. W. Lloyd, J.P., Carmarthen, and Mr. Oswal Davies, Pontypridd, were presented to the four students who had gained the highest distinction in certain subjects during the past nine months' session. The recipients of these prizes were:—O. J. Rees (pharmacy), C. P. Morgan (materia medica), T. D. Evans (chemistry), and D. H. Burry (general progress). In presenting the prizes, the acting principal (Mr. T. Gilbert Jones) expressed grateful thanks to those gentlemen who had offered the prizes. The Swansea Pharmacists' Association has again (as last year) offered a silver and a bronze medal to the two best students qualifying at the forthcoming examination. z



## "Daily Express" Exhibition

ORGANISED by the "Daily Express" (The London Express Newspapers, Ltd.), a Woman's Exhibition opened at Olympia, West Kensington, on July 12, and remains open till July 29. The Exhibition has been planned on an ambitious scale, and may almost be said to constitute a British Industries Fair arranged from a feminine point of view. An excellent catalogue (of 174 pages) is obtainable. In the following paragraphs we summarise our impressions of stalls of interest to the drug-trade.

ALLEN AND HANBURY, LTD., have fitted up, in connection with the exhibit of a London hospital, a model operating theatre, with instruments, anaesthetising apparatus, oxygen cylinder, and an operating table of the latest pattern, which can be raised or lowered with a touch of the foot. The operating furniture is of considerable interest as a legitimate development of the already wide scope of this historic house.

AMAMI, LTD., are selling an outfit at a nominal charge at their stall, and are giving free advice. These features, combined with the high-class character of the toilet products themselves, are destined, it may be predicted, to bring many "repeat" orders.

EDWARD COOK & CO., LTD., have a large stand, a considerable part of which is devoted to household soaps. In toilet soaps, such old-established favourites as "Rivera" are prominent.

Any exhibit made by the house of DE LUZY strikes a note of distinction, and the present display is no exception to the rule. Prices of various products are given in the catalogue, and increasing sales should result.

The first thing to strike the eye on approaching the stall of DUBARRY ET CIE. is a massed display of bath salts, to the smartness of which attention has been called in our columns on previous occasions. Like others of the wise exhibitors, Messrs. Dubarry have made a subtle distinction between the kind of stand they have dressed at this Exhibition and the showroom kind of stand that pertains to trade exhibitions, and thus have exemplified the art of window-dressing.

WILLIAM EDGE & SONS, LTD., have a smartly fitted stand, at which they are giving demonstrations in the use of Drummer dyes—perhaps the best of all ways of introducing them to the notice of prospective users.

THE GORDON HALL SCHOOL OF PHARMACY FOR WOMEN occupies a stall that should attract numerous visitors. In the centre is an enamel-topped counter, at which dispensing will be done from time to time *coram populo*. In front, and round the walls, are ranged materia medica specimens of "museum" excellence supplied by The British Drug Houses, Ltd. (Mr. C. A. Hill adding his arsenic-estimating apparatus), Burroughs Wellcome & Co., W. J. Bush & Co., Ltd., S. Maw, Son & Sons, Ltd., and the South Metropolitan Gas Co. Mr. F. H. Glew has lent a representative group of radium products; and a prominent corner is occupied by

MRS. GRIEVE, who has brought from her herb school and farm fifty medicinal plants in various stages of flower and fruit. Some of them—e.g., hyoscyamus—are quite easy for the pharmaceutical visitor to "spot"; others are not so easy. The opportunity of seeing so many growing specimens should not be missed.

THE NATIONAL ASSOCIATION OF WOMEN PHARMACISTS has pitched its tent in the "What shall she be?" section. Wholesale and retail chemists are in attendance for the purpose of advising girls how to train for a career in the drug-trade or in institutional work, the experience of the Association being that time and money are wasted for want of guidance in this respect.

A. & F. PEARS, LTD., have an exhibit comprising their soaps and "Golden" series. When the C. & D. representative arrived on the Press view day Messrs. Pears' unpacking was not quite finished; but their "cohorts were gleaming in purple and gold," and it was evident that something distinctive was being prepared.

THE "SANITAS" Co., LTD., are making a comprehensive display of their proprietaries at a well-placed corner stand. The attention of visitors is called to the fact

that the Exhibition building is disinfected daily with "Sanitas."

THE UNITED LABORATORIES & CHEMICAL Co., LTD., are concentrating on Sprazone, with special reference to the house-fly season. The disinfectant is also commended to the notice of householders troubled with moths or mosquitoes.

M. V. VIVAUDOU has availed himself of the opportunity of popularising his high-class toilet preparations and those of Arly and Delettrez. Such lines as his peroxide shaving-cream have a distinction and finish that should ensure ready sales, and they make a fine display.

Among other exhibitors are:—F. S. CLEAVER & SONS, LTD.; THE CROWN PERFUMERY Co., LTD.; THE DYESTUFFS MANUFACTURERS OF GREAT BRITAIN; JOHN KNIGHT, LTD.; KOLYNOS, INC.; LEVER BROTHERS., LTD.; PASTEX DYES, LTD.; E. RIMMEL, LTD.; THE VINOLIA Co., LTD. Acknowledgments for services rendered to the Exhibition are made in the catalogue to: ALLEN & HANBURY, LTD.; JOHN BELL & CROYDEN, LTD.; BURROUGHS WELLCOME & Co.; THE BRITISH DRUG HOUSES, LTD.; JOHN J. GRIFFIN & SONS, LTD.; THE "SANITAS" Co., LTD.

## Westminster Wisdom

By the "C. & D." Parliamentary Representative

### MERCHANDISE-MARKS BILL

This Bill, which was sent down from the House of Lords, was read a second time in the House of Commons on July 5. There was considerable criticism of the measure, which was committed to a Standing Committee.

### PRINTED MATTER POST

Questions were asked in the House of Commons on July 6 regarding the delay of the Post Office in delivering postal matter bearing  $\frac{1}{2}$ d. stamps. The Postmaster-General said he was unable to extend the scope of the reduced rate.

### SUMMER TIME BILL

This Bill, which was read a third time in the House of Commons on July 7, fixes the period of Summer Time as from the third Sunday in April, the day after the third Saturday, to the third Sunday in September, the day after the third Saturday.

### SODIUM PYROPHOSPHATE

Dr. Murray asked the President of the Board of Trade, on July 10, whether, in view of the Referee's decision under the Safeguarding of Industries Act on points of principle in the cream of tartar and other cases which have come before him, he will consider removing sodium pyrophosphate from the lists defining the key industries schedule.

Mr. Baldwin referred him to a reply on May 15.

### SMUGGLING "DANGEROUS" DRUGS

Mr. Lyle asked the Home Secretary, on July 10, whether, in view of the seriousness of the recent case of cocaine smuggling from Hamburg, any additional precautions against such smuggling are being taken; whether there are adequate women searchers; and whether, since women are largely engaged in this traffic, the rewards for detection can be very largely increased.

Sir J. Baird referred the member to a reply on March 27, and added that in the case of women suspected of smuggling the search is conducted by competent women searchers, of whom there is an adequate supply, and who receive a fee for each case. Rewards are paid for detections made, and there appears no reason for increasing such rewards on account of the sex of the offender.

"BARIUM AND STRONTIUM IN CANADA" is the title of a 100-page illustrated pamphlet issued by the Department of Mines, Canada. The report contains considerable information relating to barytes deposits in Nova Scotia and other parts of Canada, and also deals with the uses of barytes.



## Association Affairs

**Devon.**—The annual meeting of the Devon Pharmaceutical Association was held at the Guildhall, Exeter, on June 28, Mr. P. F. Rowsell (Mayor of Exeter) presiding. The report of the executive showed that the record membership of the previous year had not again been realised. The fall in subscriptions was attributed largely to the uncertainty which has existed as to the future of local associations. With the idea of promoting the education and welfare of apprentices and registered assistants in the county, an educational sub-committee had been formed, and a register of such apprentices and assistants is being compiled. The financial statement, showing a balance in hand of £28 7s. 11d., was presented by the treasurer, Mr. P. F. Rowsell was again elected *President*; Mr. T. F. March, *Vice-President*; Mr. S. S. Brown, *Treasurer*; and Mr. F. Southerden, *Secretary*. The members of the Devon Pharmaceutical Committee, together with Messrs. G. F. Fisher (E. Devon), F. E. Battership (N. Devon), D. Reid (Exeter), J. D. Turney (Plymouth), and T. W. Dunsford (Torquay) were elected members of the executive, and Messrs. D. Reid and J. Taylor, auditors. At the close of the meeting, the members were entertained to tea in the Mayor's parlour by the Mayor and Mayoress. A meeting of the Devon Branch of the Retail Pharmacists' Union was held at Exeter on June 28, Mr. Hinton Lake (vice-chairman) presiding. Mr. T. F. March reported as delegate to the R.P.U. Conference. The secretary reported on action taken with respect to various proprietaries, and further steps were discussed, the chairman remarking on the valuable results which had been obtained through united effort. The annual meeting was fixed for September 27.

**Edinburgh Chemists', Assistants' and Apprentices' Association.**—The third botanical excursion of the session took place on June 30, when the members, under the leadership of Mr. Henry Stout, Ph.C., travelled to Barn-ton. In ideal weather the company carried on active field work along the valley of the Almond River to Cramond and back to Barn-ton. Among plants collected other than those in previous excursions were *Berberis vulgaris*, *B. canadensis*, *Cardamine impatiens*, *Viola tricolor*, *Trifolium repens*, *Ribes nigrum*, *Circea luteana*, *Conopodium majus*, and *Marchantia polymorpha*. On the motion of Mr. Rutherford Hill, a cordial vote of thanks was awarded to Mr. Stout.

**Harrogate.**—The annual meeting of the Harrogate Pharmaceutical Association was held on July 6, the President (Councillor A. Mortimer) in the chair. After a résumé of the year's work had been given, the election of officers took place as follows: *President*, Mr. John M. Dawson; *Secretary and Treasurer*, Mr. Percy L. Ridge; *Committee*, Messrs. Harper, Handford, Illingworth, Mortimer, and Wood.

**Leamington.**—The Warwickshire Pharmaceutical Association met on July 5, the President (Mr. Hutton) in the chair, when it was agreed that the Warwickshire Branch of the Pharmaceutical Society should consist of all the smaller villages or townships in the county, and including larger towns, such as Coventry, Rugby, Nuneaton, etc., the secretary of the Association to act until the Society had appointed their own secretary.

**Manchester.**—An extra meeting of the Manchester Pharmaceutical Association was held on June 29, at which the proposed new by-laws and revised rules of the Association were brought forward. The President (Mr. E. H. Simmons) occupied the chair. It was announced that a mutual arrangement had been arrived at by which a representative, nominated by the Chemists' Assistants' Association, would have a seat on the Council of the parent body (the Manchester Pharmaceutical Association), and a representative nominated by the Council of the latter would have a seat on the Council of the Junior Association. Mr. A. J. Pidd (Treasurer) said the business transacted had recalled the days of his early connection with the Association, when they had a close relationship with the Assistants' Association. He was pleased to see the present arrangements made.

## British Pharmaceutical Conference

### NOTES

The Conference begins on Monday week, July 24. A special anti-cyclone and favourable winds have been ordered from the Clerk of the Weather for the occasion. There is nothing, therefore, to deter intending visitors from sending in their applications for tickets and hotel accommodation. Delays are proverbially dangerous. A plan of the seating for the Conference dinner is being prepared, and, as the local committee wish to place each visitor where he or she wishes, the necessity for early application is further emphasised.

Golfers are being prepared for by Mr. W. J. Clay, 40, Carlton Street, Nottingham, to whom all applications should be made. Tennis and bowls at West Bridgford are in the hands of Mr. G. J. R. Parkes. Numbers of woods will be provided, but all budding Pattersons and Lenglens are requested to bring their own racquets.

The motor-boat excursion on Wednesday afternoon is for ladies only; the sterner sex will then have an opportunity of proving that the Conference exists for work first and pleasure afterwards. Remedies for sea-sickness will be provided upon application to any member of the local Committee, in order that the afternoon tea at the Mikado Café after the voyage may be enjoyed in perfect comfort.

### PAPERS RECEIVED

The first list of papers received for presentation in the science section includes the following:—

- "The Viscosity Test." By Charles W. Gosling.
- "A Further Note on the Ether Solubility of Scammony Resin." By Harold Deane, B.Sc., F.I.C., and W. E. Edmonton.
- "The Rapid Estimation of Quinine Salts in Tablets." By S. G. Liversedge and E. W. Andrews.
- "A Simple Instrument for taking Refractive Indices of Liquids." By Robert Fouracre.
- "A Note on the Occurrence of Santonin." By Henry G. Greenish, F.I.C., and Constance E. Pearson.
- "A Contribution to the Study of Strophanthus." By Karam Samaan, Ph.D., M.Sc.
- "The Arsenic Content of some of the Marine Algae." By A. J. Jones.

### NEW MEMBERS

At a meeting of the Executive Committee held on July 6 the following new members were elected:—

- |                                       |                                    |
|---------------------------------------|------------------------------------|
| Dr. A. J. Barnes, London.             | Mr. H. B. Holthouse, W. Bridgford. |
| Dr. J. W. Bowis, W. Bridgford.        | Mr. Peter Irvine, London.          |
| Mr. G. W. Briggs, Sutton-in-Ashfield. | Mr. H. Jackson, Sandiacre.         |
| Mr. J. W. P. Chambers, W. Bridgford.  | Mr. G. S. Kitchen, Glasgow.        |
| Mr. J. P. J. Gordon, Rock-hampton.    | Mr. A. Knowles, Sheffield.         |
| Mr. W. C. Harris, London.             | Mr. C. W. Ridyard, Codnor.         |
| Mr. F. Henning, Portsmouth.           | Mr. J. H. Shepherd, Woodville.     |
| Mr. F. C. Highfield, Cardiff.         | Mr. A. Tompkin, Nottingham.        |
|                                       | Mr. J. C. Wiggins, Ipswich.        |
|                                       | Miss A. Williamson, Preston.       |
|                                       | Mr. J. H. Wright, Sheffield.       |

### THE BATH INVITATION

Prominence is given in a recent issue of the "Bath Chronicle" to the invitation which, it is understood, has been issued on behalf of Bath pharmacists to the Pharmaceutical Society to hold a conference in the city in 1924. The "Chronicle" adds: "Before the invitation was accepted a guarantee fund had to be raised, but this was soon done to the entire satisfaction of the society's officials."

**GERMAN LANGUAGE BANNED.**—The Czecho-Slovak Ministry of Health has informed pharmacists in the German parts of the Republic that they must use the national—Czech—language on their signboards, labels, and other public notices. A beginning has already been made with the pharmacies in Carlsbad.



## Summer Outings

### Halifax Chemists Visit Boston

THE Halifax Chemists' Association had their annual excursion on July 7, when forty members and friends journeyed by charabanc to Boston Spa, tea being served at the Royal Hotel. Though the weather was anything but enjoyable, they encountered little rain on the journey. At Boston Spa they spent a delightful time.

### A Motor Drive to Hambledon

MEMBERS of the Portsmouth and Southampton Pharmacists' Associations with lady friends met at Hambledon, Hampshire, on July 5. The journey was made in charabancs by a company numbering about ninety. A cricket match between chosen elevens was abandoned owing to bad weather, and tea and *causerie* became the order. Mutual amenities between the Associations were voiced by the respective Presidents, Mr. A. B. Sparrow, Portsmouth, and Mr. F. B. Wride, Southampton.

### Manchester Chemists' Picnic

THE picnic to Grindleford on July 5, organised by the Manchester Pharmaceutical Association, was a pleasant

day's outing, despite wet weather. At the Maynard Arms Hotel, after a refreshing cup of tea, some of the visitors played croquet. Afterwards, the President announced a short whist drive, at the conclusion of which prizes were distributed. Mrs. Breese won the ladies' prize, and Mr. Travis the gentlemen's prize.



Photo] [Cleworth.

Mr. A. J. PIDD (Treasurer) and Mr. T. MILLER (Secretary) of the Manchester Pharmaceutical Association at Grindleford.

### Plymouth and Exeter Excursion

ON July 5 Plymouth pharmacists and their friends filled two large charabancs and travelled over Dartmoor to Widdecombe-in-the-Moor, where light refreshments were obtained and the old church visited. They continued their journey to the Golden Lion Hotel, Ashburton, where they were met by a party of pharmacists from Exeter, and the company of nearly eighty sat down to high tea. Mr. B. Shelton (chairman, Plymouth branch) extended a hearty greeting to the Exeter chemists. In Plymouth and Exeter the pharmaceutical ranks were closing up, he said, and as they acquired greater local cohesion they realised the value of closer co-operation between the districts. The West would not be found wanting in the new spirit of reorganisation which was moving the craft, and he hoped that experiment at Ashburton was but the forerunner of many similar meetings. He wished to convey the thanks of the company to the secretaries of the respective branches, and to their treasurer (Mr. J. H. Lewis) for their efficient services. Mr. Eric Lemmon (Exeter) supported the remarks of Mr. Shelton. Mr. A. C. Milton (hon. secretary, Exeter branch) expressed thanks on behalf of the secretaries, and Mr. F. A. Spear (secretary, Plymouth branch) also replied.

### North-East Londoners Visit Tring

THE summer outing of the North-East London Pharmacists' Association took place on July 6. Despite the doubtful appearance of the weather, the party left Dalston Junction in two motor charabancs for a tour via Southgate, Barnet, Elstree, Watford, Boxmoor and Berkhamstead to Tring. Amongst those present were Mr. J. A. Thompson (President) and Mrs. Thompson, Mr. and Mrs. Scott, Mr. and Mrs. Hodgson, Mr. A. P. Barnard, Mr. G. B. Barnard, Mr. and Mrs. G. A. Tocher, Mr. and Mrs. Pinson, Mr. and Mrs. Reid, Mr. T. Edwards (Secretary)

and Mrs. Edwards, Messrs. Pentney, Elwell, Beckwith, and others. There was glorious sunshine at Tring, which was reached about 5 p.m., when an excellent high tea was served at the "Rose and Crown." In a short speech after tea, the President expressed gratification at the support that was given to the organisers of the outing. Mr. Barnard complimented the Secretary (Mr. Edwards) for arranging the outing, and intimated that by special permission secured by Mr. Edwards the party was privileged to view Lord Rothschild's estate (Tring Park), also his private museum, containing specimens of wild animals and birds. The return journey was made via Dunstable, St. Albans, Potter's Bar, Enfield, Finsbury Park and Stamford Hill. The outing was most enjoyable and successful.

### Birmingham Chemists at Stratford

THE annual excursion of the Birmingham Pharmaceutical Association took place on July 5, the attendance constituting a record, 106 members and friends being present. The place chosen was Stratford-on-Avon. The majority travelled by motor-coaches, and were joined there by a contingent (principally members of the Birmingham Pharmacists' Motor Club), who reached Stratford on their own cars and in motor-cycles. A detour was made upon the way, the coaches passing through Shottery, where a short halt was called at "Ann Hathaway's Cottage." High tea was served at the Shakespeare Gallery Café, Stratford. Owing to the inclemency of the weather an extensive programme of sports, which had been arranged, could not be proceeded with, but cards and dancing at the café were substituted. The President (Mr. J. W. Atkinson) welcomed the visitors, mentioning in particular Mr. Spencer, of Stratford-on-Avon, who rendered much assistance in making arrangements for the excursion, and Mr. and Mrs. Lester, of Nuneaton. He made a presentation, on behalf of the members of the Motor Club, to Mr. and Mrs. Mousley (Mr. Mousley having acted as secretary of that organisation since its inception) on the occasion of their silver wedding, of a silver inkstand, suitably engraved, and a framed enlargement of a motor club group photograph. Mr. Mousley responded. The motor-coaches returned from Stratford at 8.30 p.m., and, although heavy rain continued during the whole of the return journey, the general expressions of opinion were that despite the weather conditions the excursion had been quite successful.

**POISON-GAS EXPERTS.**—"Since all the various means adopted by our former enemies, such as paying State subsidies to their own chemical industry, the introduction of a system of licensing imports, the unscrupulous utilisation of German patents, and an extensive spy system to ferret out commercial and manufacturing secrets, have failed to destroy Germany's supremacy in the manufacture of chemicals, a new attack against the German chemical industry is being prepared by means of a skilful Press campaign." These remarks preface an allusion in a German pharmaceutical journal to an article published in the "Frankfurter Zeitung" dealing with a publication "by an English major with the French name of Victor Lefebvre," under the title of "The Riddle on the Rhine," to which Field-Marshal Wilson has written the preface. (The work deals with the possible secret preparation in the German chemical works of new methods of destruction.) The article concludes with the remark that "it is not difficult to discover the aim of this new onslaught against German industry. In spite of all efforts, the chemical industry in the Allied countries has never succeeded in becoming a serious competitor of the German works, and has not even been able to acquire their own home markets. To this end they required the German secrets of manufacturing processes, and as they have failed to obtain these, even with the aid of a spy system in the occupied territory, an attempt is to be made to secure these secrets by brutal means. Apparently German industry is to be forced by the dictate of the military control commissions to disclose its formulas and manufacturing secrets to its English and French competitors."



## Marriages

### Silver Weddings

(From THE CHEMIST AND DRUGGIST, July 31, 1897.)

**GREENISH-AIKMAN.**—On July 15, at Holy Trinity Church, Brondesbury Road, London, N.W., Henry George Greenish, of 11, Grove Road, Willesden Green, to Alice, youngest daughter of the late Mr. David Aikman, of Ealing.

(From THE CHEMIST AND DRUGGIST, July 17, 1897.)

**KNOTT-SMITH.**—On July 7, at the Parish Church, Farnworth, by the Rev. J. W. Cundey, M.A., vicar of Emmanuel's, Bolton, assisted by the Rev. H. S. Butler, M.A., vicar, and the Rev. R. H. Lyall, M.A., curate, of St. John's, Farnworth, Percy Knott, chemist and druggist, Bridge Street, Bolton, to Florence, only daughter of Mr. James Smith, of Bolton.

## Deaths

**GORHAM.**—On July 1, Mr. Albert Edward Gorham, chemist and druggist, 74, Lonsdale Road, Bolton.

**HAYCRAFT.**—At 357, New Cross Road, London, S.E.14, on July 1, Mr. Henry Robert Howell Haycraft, chemist and druggist, aged sixty-nine.

**HUMPHREYS.**—At Llanfair Caereinion, recently, Mr. Charles Humphreys, retired chemist and druggist, aged eighty-nine. Mr. Humphreys, who was educated in Liverpool, carried on business at Llanfair Caereinion until his retirement some years ago. He was an enthusiastic collector of books.

**JONES.**—At Folkestone, on July 9, suddenly, Mr. Chester Jones, Metropolitan magistrate, aged sixty-eight. Mr. Chester Jones was chairman of the Committee appointed by the Home Secretary to examine and consider objections to the draft Regulations made last year under the Dangerous Drugs Act.

**PERRY.**—At Bournemouth, on July 2, suddenly, Mr. Edward Charles Perry, retired chemist and druggist. Mr. Perry, who qualified in 1874, carried on business in Basingstoke for many years. On his retirement the pharmacy was acquired by Mr. B. C. Jukes, chemist and druggist.

**WATSON.**—On July 4, Mr. Frederick Percy Watson, Ph.C., 6 and 7, Bailgate, Lincoln, aged fifty-six. Mr. Watson, who passed the Major examination in 1887, carried on business in Lincoln for nearly thirty years. He was a churchwarden for a quarter of a century, and was well known in the Masonic world as the founder of the St. Hugh Instruction Lodge in Lincoln and an office-bearer in several other lodges.

**WHIFFEN.**—At Hong Kong, on July 3, Captain T. W. Whiffen, F.R.G.S., F.R.A.I., F.R.Z.S., late 14th Hussars, eldest son of Mr. Thomas J. Whiffen (Whiffen & Sons, Ltd.), Cerris House, Putney, and Barn Rocks, Aldwick, aged forty-four.

## Wills

**MR. JAMES WALLBANK**, 68, Granville Road, Blackburn, director of Openshaw, Ltd., who died on April 30, left estate of the gross value of £2,367 1s. 7d., with net personality £2,184 11s. 7d.

**SIR ALFRED PEARCE GOULD**, F.R.C.S., Ashe, Ashburton, Devon, and of 26, Ferncroft Avenue, Hampstead, London, N.W., who died on April 19, left estate of the gross value of £84,054 8s. 1d., with net personality £77,943 12s.

**MR. FRESHFIELD REYNOLDS**, Ph.C., Long Sutton, Langport, Somerset, who died on June 15, left estate valued at £1,023 0s. 11d. gross, with net personality £849 0s. 11d. Probate of his will has been granted to his son, Mr. William Colebrook Reynolds, chemist, Wharfedale, Upminster.

## Personalities

**MR. F. A. WILLCOCK**, chemist and druggist, Victoria Street, Wolverhampton, recently unveiled a memorial shrine in the churchyard of St. Peter's Church.

**MR. COLIN BARNES**, son of Mr. Colin M. Barnes, chemist and druggist, Ho sforth, Leeds, has taken, with first-class honours, the degree of B.Sc. at Leeds University.

**MR. THOMAS STEPHENSON**, B.Sc., F.R.S.Edin., editor of "The Prescriber," has graduated as Doctor of Science. His thesis dealt with the chemistry and pharmacology of Indian drugs.

**MR. D. W. T. KIRKMAN**, son of Mr. W. E. Kirkman, chemist and druggist, New Milton, Hants., has passed the B.Sc. (electrical engineering) examination at Manchester University with second-class honours.

**MR. WILLIAM REGINALD LEVIE**, son of Mr. Thomas Levie, chemist and druggist, Lynn Street, West Hartlepool, has passed the final examinations for the degrees of M.B., Ch.B., at Edinburgh University.

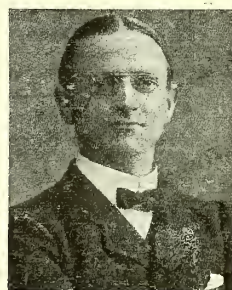
**MR. KAY** (Marsden & Kay (Emka), Ltd., manufacturing chemists, Preston, Lancs.), has just returned from a tour round the world. Mrs. Kay accompanied him, and sight-seeing was interspersed with business in all the countries visited.

**PROFESSOR H. E. ARMSTRONG**, the newly elected President of the Society of Chemical Industry, was presented, on July 5, during the annual conference of the Society at Glasgow, with the Messel medal. Professor Armstrong subsequently delivered the Messel lecture, the first of a series provided for by a bequest from the late Dr. Rudolph Messel, F.R.S.

**ALDERMAN G. CLARIDGE DRUCE**, LL.D., Oxford, has been unanimously elected acting Vice-President of the Gilbert White Fellowship, in succession to the late Professor G. Boulger. Dr. Druce has just been making visits to the Earl Buxton in Sussex; the Earl of Dartmouth at Patshull, and Sir Roger Curtis, Bt., in Staffordshire, in addition to attending a meeting of the International Association of Journalists in Holland. During this month he is to go to Scandinavia for botanical purposes.

**MR. SYDNEY DUNSTAN**, F.C.S., chemist and druggist, has been appointed house governor and secretary to the Royal Victoria Infirmary, Newcastle-on-Tyne, at a salary of £700 per annum. Mr. Dunstan served his apprenticeship in pharmacy at Redruth, and was for the next three years with Barron, Harveys & Co. (now absorbed in The British Drug Houses, Ltd.). He qualified in 1898, and then went to the London Hospital, where for six years he dispensed, taught pharmacy, and assisted in book-keeping. This experience proved valuable when he was appointed pharmacist to the Newcastle Infirmary, in which his management resulted in a saving of £600 to the institution during the first year.

Mr. Dunstan has been in charge there for sixteen years; and, although there were eighty applications for the post of house governor and secretary, no other candidate was interviewed by the authorities. An illustrated account of the well-equipped department so long in Mr. Dunstan's care appeared in THE CHEMIST AND DRUGGIST, I., 1907, p. 147.



MR. S. DUNSTAN

**CHILIAN IODINE.**—In 1913 the exports of iodine from Chile were valued at 5,134,400 pesos, increasing in 1916 to 21,627,936 pesos, representing the largest amount ever exported in a single year. Since the Armistice the value of the export has declined, and in 1921 the total recorded was 9,991,132 pesos. The Combinacion de Yodo has offered prizes for the discovery of new uses to which the chemical can be put.



## Trade-marks Applied for

The figures in parentheses refer to the classes in which the marks are grouped, for a list of which, with particulars as to registration, see "The Chemist and Druggist Diary," 1922, p. 277.

(From "The Trade-marks Journal," June 7, 1922.)

- "IMEX" in triangular border (border disclaimed); for chemicals (1). By The Wholesale Import & Export Merchants, Ltd., Alderman's House, Bishopsgate, London, E.C.2. 407,460. (Associated.)
- "DOGTONE," over signature "A. Benoit" ("Dogtone" disclaimed); for dog medicines (2). "SKINCURA," over signature ("Skincura" disclaimed). "SKINCURA," with device of dog scratching ("Benoit's" and "Skincura" disclaimed); for veterinary medicines (2). By A. E. Benoit Gacher, Blaxton House, Thorne Road, Blaxton, near Doncaster. 422,645/646; 423,388. (Associated.)
- "VISAN"; for medicinal chemicals (3). By J. C. W. Jorgensen, Ballerup, near Copenhagen, Denmark. 421,938. (Associated.)
- "WARDEX"; for medicated cotton wool (3). By The Wardle Cotton Co., Ltd., Buckley Lane, Wardle, Rochdale. 422,840. (Associated.)
- "BLUE CRYSTAL BRAND, THE MARK OF QUALITY," with device of crystal; for medicines (3). By Chrystoid (Chemists), Ltd., 1, Gower Street, Bootle, Lancashire. 422,888.
- "KASCO TUBACILLUS"; for medicinal chemicals (3). By Hedley Cassell & Co., 1, Elm Tree Avenue, West Bridgford, Nottingham. 423,464.
- "PASSMON"; for a liniment (3). By A. Deverell, 6, Lupus Street, Pimlico, London, S.W.1. 424,194.
- "BROCHA"; for a medicinal eye preparation (3). By M. Freeman, 105, High Street, Camden Town, London, N.W.1. 424,722.
- "FRUTEFLORA"; for a food flavouring (42). By Foster Clark, Ltd., Hart Street, Maidstone, Kent. 423,435.
- "VIMPEP"; for food substances (42). By Bovril, Ltd., 148-166, Old Street, London, E.C.1. 423,602.
- "DAVENPORT'S" over device formed of letters "S. O. S." and facsimile signature ("Davenport's" and "S. O. S." disclaimed); for a skin preparation (48). By M. Davenport, 7, Brighton Road, Crawley, Sussex. 420,847.
- "GLEEMSTAR," under star device; for toilet creams and nail polishes (48). By F. Woodward, 55, Market Street, Manchester. 421,287.
- "TONOLIDENT"; for a teeth preparation (48). By F. Montuschi, 30, Chester Terrace, Regent's Park, London, N.W.1. and G. Fortuna, 41, Frith Street, Soho, London, W.1. 422,744.
- "PULCINELLO"; for face massage cream (48). By P. Wester, Davies Cottage, Leighton Road, Kentish Town, N.W.5. 423,358.
- "HERGOTHAL," on circular device; for skin preparation (48). By H. G. T. Aldridge, D. E. Aldridge, and F. G. Hennell, Pounzi, Birdham Road, Chichester, Sussex. 424,596.
- "QUILLIGENE"; for perfumery, etc. (48). By The Standard Tablet Co., Ltd., Hove Park Villas, Hove, Sussex. 424,642.

(From "The Trade-marks Journal," June 14, 1922.)

- "CAOLINE" and "NORLANTO"; for chemicals (1). By A. Cameron, Wodencroft, Linden Road, Gosforth, Newcastle-on-Tyne. 424,791/792.
- "CAPOKIT-GRIESHEIM" ("Griesheim" disclaimed); for chemicals (2), and for medicinal chemicals (3). By Chemische Fabrik Griesheim-Elektron, 31, Gutleutstrasse, Frankfurt am/Main, Germany. 417,752 (Associated.)
- "VAPORUB"; for chemicals (2). By Vick Chemical Co., 100, Milton Avenue, Greensboro, Carolina, U.S.A. 421,987. (Associated.)
- "RELIANCE"; for all goods (2). By T. W. Ranson, Ltd., 7, Brazenose Street, Manchester. 425,239.
- "TONICON," on oblong label; for medicated jujubes or pastilles (3). By Tregaron Peat Co., Ltd., 195, Strand, London, W.C.2. 421,630.
- "TEDDYLAX"; for medicinal chemicals (3). By W. Hill, 8, Watson Street, Glasgow. 423,748.
- "VINCOIT"; for medicinal chemicals (3). By F. J. Hitchcock, 9, Greenhill Lane, Riddings, Derbyshire. 424,150.
- "VALBORNYL"; for medicinal chemicals (3). By W. J. Patey, 76, New Bond Street, London, W.1. 424,720.
- "STAB"; for medicinal chemicals (3). By Boot's Pure Drug Co., Ltd., 37, Station Street, Nottingham. 424,941. (Associated.)
- "NERVITA"; for an invalid food powder (42). By W. L. Milner and A. Phillips, 18, Cadogan Street, Cardiff. 422,604.

## Trade Notes

RUBINAT-LLORACH APERIENT WATER is again available. The sales agents are Everett & Co., 5, Lloyd's Avenue, London, E.C.3.

KI-UMA, a new cure for rheumatism, is being introduced by Ki-Uma, Ltd., Bath. An announcement regarding the article is made in our advertising pages.

GRISON'S PURE OATS COCOA CO., LTD., 72, Regent Street, Piccadilly Circus, London, W.1, offer to send samples of Grison's Oats Cocoa, with trade terms, to any chemist who sends a post-card request.

"LITTLE BLACK DIVILS" is the name applied to small menthol and licorice pastilles by Bewells, Ltd., manufacturing chemists, 19-21, Pitfield Street, London, N.1. These are packed in boxes retailing at 6d., are reported as "a top hole seller."

HYDROS, the brand of sodium hydrosulphite made by Brotherton & Co., Ltd., City Chambers, Leeds, is much employed in industries as a powerful bleaching agent. Messrs. Brotherton have issued a useful pamphlet giving full details of the quantitative analytical methods of testing the product. A copy of the pamphlet will be sent on application.

SUPPRESSION OF THE HOUSE-FLY.—The United Laboratories and Chemical Co., Ltd., 87, Queen Victoria Street, London, E.C.4, have issued a pamphlet (price 3d.), entitled "Treatise on the House-fly," dealing with the growth, habits and methods of suppression of the fly. The pamphlet ends with a note regarding the use of Sprazone solution for destroying flies.

MANCHESTER CHEMISTS' EXHIBITION.—Provincial Exhibitions, Ltd., City Hall, Manchester, announce that two-thirds of the space at the exhibition in November has already been booked. The exhibition is held under the auspices of the Manchester Pharmaceutical Association, and the Retail Pharmacists' Union is to hold a meeting during the run of the exhibition.

CEPHOS SHOWCARD.—Cephus, Ltd., Blackburn, send us one of the large window-display showcards which the company supply to the trade. The card is of the cut-out variety, there being a space for a package of Cephus, and the figure of a lady which occupies the upper part is arranged with the arm separately attached to give a proper stereoscopic effect. Two side panels have upon them lettering dealing with the uses and price of Cephus powders.

"DRAUGHTSMAN."—Particulars will be found, in the advertisement of the Draughtsman Speciality Co., Walter House, Bedford Street, Strand, London, W.C.2, in this issue, of an indigestion remedy known as "Draughtsman," and put up in a cardboard box, the lid of which is patterned after the manner of a draught-board. The box contains compressed tablets which are practically tasteless, prepared from a formula on which the makers place reliance. Window-display material is available for this distinctive and already extensively advertised line.

## Information Department

### INFORMATION WANTED

C/127. "Popular" feeding bottle	S/47. "Mitsouko" perfume
L/77. Dr. Elliott Richards' toilet cream	B/67. Freer's Lysol
W/77. Orcin	M/47. "Famel" brand chemical-proof tins
M/77. Drayton dyes	C/67. "New Cross" baby powder
B/107. Volnay's Indian amber perfume	W/47. Duotonal
C/77. Dundley's chilli paste	M/57. "Marien" or "Murien" (a stone-preserving composition)
H/77. Lea's oro-nasal respirator	

### INFORMATION SUPPLIED

"Jay Mack" Ledgers. M/107	Pneumosan. P/87
Urodonal L/117	Capsuling machines. L/107
Radiol for horses. L/117	"Elnstar" elastic hosiery.
Colloidal sulphur. H/117	S/117
Knoll's preparations. W/67	"Pointex" tooth brushes.
"Pastex" dyes. S/87	L/77



## Observations and Reflections

By Xrayser II.

### The Council

has by a narrow majority done the right thing in giving the seat vacated by the death of Mr. Currie to Mr. Morgan Lloyd. I know nothing of Mr. Lloyd but his public record (which is enough to give him a strong claim to the seat), and nothing of the grounds on which the other aspirant to the seat was recommended to the Council except that he hails from Scotland. That both are good men there is no doubt, but, other considerations being anything like equal, it is desirable that if co-optation is admitted at all it should follow the practice which has almost become a rule—the choice should fall upon the man who at a recent election came nearest to the list of successful candidates. And in this case other considerations were not equal: there was a balance in favour of Mr. Lloyd, since Wales was not previously represented directly on the Council, and Scotland was. This fact alone, with local representation in the air, was enough to determine the choice.

### The Draft Annual Report

of the British Pharmaceutical Conference makes two things clear, neither of which will be regarded by many well-wishers of the Conference as of good augury for its future. The first is that the amalgamation of the Conference with the Society has been and is being forced upon the Conference by the Society against the wish of many old members of the Conference. It is not a spontaneous movement on the part of the latter, not a natural development, but an enforced absorption. Faced with the threat of a rival Conference, it sees no choice open to it but acceptance of the invitation: "Come, live with me in my inside, you little toothsome thing," so blandly presented by the President of the Society. The other evident fact is that under its new constitution the Conference will no longer be a free association of pharmaceutical workers, but will be virtually under the guidance and government of the Pharmaceutical Council. A third of the members of the Executive elected at the Conference meetings must be members of the Pharmaceutical Council, and the President of the Society will be *ex officio* a member of the Executive and the President of the Conference. There has, of course, always been a close association between the two bodies, and members of the Council have from time to time (as at present) been on the Conference Executive; but they were there by free election, and there is all the difference in the world between friendly co-operation and a legal bond. It appears, too, that in the proceedings of the Conference a distinction will be made between Conference matters and Society matters, so that the amalgamation will be imperfect after all, and a confusion similar to that which many predict in the "organisation" scheme of the Society is quite likely to arise. The Council, indeed, appears here, as elsewhere, to be endeavouring to combine elements that are really incompatible, caring little or nothing for inconsistencies or contradictions so long as there is an apparent unity and the Society is, at least nominally, *über alles*.

### I Rather Pride Myself

on having "spotted" an omission in your July list. It does not include Ung. "brilliant green"! It is true no other list that I have seen does so; some of them ignore brilliant green itself (which yours does not); but one has got into the habit of regarding yours as *sui generis*. Next to its inclusiveness, the feature of your list which most recommends it to me is the facility with which I find instantly any item that is wanted. The justness of your wholesale quotations (to which you call attention) is another, and serves the very useful purpose of a check on the lists of individual wholesale houses. Wholesale lists do not, in my experience, often differ very widely in their pricings, but they do differ sometimes, and it is useful to have a disinterested arbiter between them.

### Organisation

in Scotland seems, as I foresaw, to be beset with peculiar difficulties, and there is one point with regard to it that I have not seen mentioned. When the new local branches are formed, will they be branches of the North British Branch or of the parent Society? And, again, what is the precise legal definition (if any) of the difference between the North British Branch and a strictly local branch, whether in England or Scotland? Perhaps I am considering too curiously, but I suppose there are branches and A Branch, otherwise the elevation of our associations to this dignity would seem to depress the N.B. Branch. It is difficult to keep an altogether clear head in such a maze.

### The Very Sensible Letter

of the Codex Committee on the colouring of poisons does full justice to the importance of the subject without committing the Society to anything more. Very wisely, as I think, nothing is said in depreciation of "mechanical" safeguards, the "danger" of which has been very much exaggerated. There is, in fact, no danger in them if properly regarded. No sensible person would think that the use of poison bottles, for instance, exonerates him from the duty of being careful in the handling of dangerous drugs. Distinctive labels and poison closets belong to the same category, and are universally used without ill results. Why should the distinctive colouring of the more dangerous substances make us careless? Certain tablets are already coloured for us by their makers, and although, as a case reported in to-day's (July 7) papers shows, this does not prevent mistakes, it does undoubtedly tend in that direction. But the practicability of the thing on a large scale is another matter. To find fast colours, absolutely neutral and inert, for all the poisons that would reasonably be subject to this precautionary treatment would, to say the least, be difficult, and the Committee does well to emphasise this aspect of the question.

### The "Souvenir of Parke, Davis & Co.,"

a copy of which I have just received, is one of the daintiest in appearance and most interesting in character of the many advertising booklets of wholesale or manufacturing firms that I have seen. The illustrations—especially those of the firm's premises at Hounslow and elsewhere, and of the nuxvomica and belladonna plants—are perfect gems of colour printing, and the descriptive letterpress is really informative as to the aims and methods of the firm. I am not sure that I understand what is meant by "quality that defies a standard"—one would have thought that a standard might be fixed which quality could not surpass, and if quality is taken to include strength it is not desirable, surely, that it should be "defied"—but, this little flourish apart, those who are best acquainted with the firm's products will, I do not doubt, be the first to acknowledge the justice of their motto "Medicamenta vera," and the uniform excellence of their preparations. I am not sure, either, that everybody would admit the adoption of standardisation by other manufacturers to be "unquestionably due to their propaganda and example"; but they have always claimed, and I believe with truth, to have been the pioneers of this movement. But standardisation was being proposed and even, though to a small extent, practised in the 'seventies of last century, while in the 'eighties the consideration in dispute was not so much its desirability as its practicability.

ITALIAN TARTARIC ACID MAKERS UNITE.—Under the auspices of the Credito Italiano Bank, the amalgamation of three important Italian firms manufacturing tartaric acid has been arranged. These comprise the Società Anonima Appula, of Bari; the Società Anonima Industria Acido Tartarico, of Casale Monferrato, and of Milan; and the Società Italiana dei Derivati della Cellulosa of Milan Linate. The capital is to be raised to 25,000,000 lire, in shares of 100 lire.

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SHOULD BE STOCKED  
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Saleable Lines. Good Profit.  
Attractive Advertising.

Weed Killer.  
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Fumigants.  
Insecticides.  
Bordeaux  
Mixture, &c.

Tomlinson & Hayward, Ltd., Lincoln.

## M. NAEF & Cie

(Late CHUIT, NAEF & Cie)

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## Synthetic & Aromatic CHEMICALS

OF EXCEPTIONAL QUALITY

### SPECIALITIES:

Bouvardia	Rose (various)
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Muguet	Narcissus
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SOLE AGENTS—

**P. SAMUELSON & CO.**  
27 Mincing Lane, London, E.C.3

Who are also direct importers of

## MUSK, CIVET, and all ESSENTIAL OILS

Telephone: Minorities 1660. Telegrams: "Moschus, Fen, London."

With Only One Writing **The McCaskey SYSTEM** The End of Drudgery

FIRST AND STILL THE BEST

## SAVES TIME AND LABOUR

THE McCASKEY REGISTER CO., WATFORD

(3)

An announcement of particular interest to you appears in this issue on page 8.

## S.V.R.—Absolute Alcohol

AND

## CHEMISTS' WINES.

Jas. Burrough Ltd. D.1 Cale Distillery, Hutton Rd.  
LAMBETH, S.E.11.

# PETROLEUM

## STERNS LTD.

80 Royal London House,  
Finsbury Square,  
London, E.C.2. (1)

# JELLIES

## STANDARDISED GALENICALS.

## RANDALL & WILSON, LTD.

Wholesale Druggists,  
SOUTHAMPTON.  
Established 1792.

## Editorial Articles

### Limitation of Pharmacies in Spain

THE conditions prevailing in the pharmaceutical profession in Spain have for some considerable time afforded welcome material for the daily newspapers, which have not hesitated to seize upon any incident which, adorned with suitable comments, might lend itself to discredit chemists. For numerous reasons the pharmacist has been



made the target for popular contempt, and certain regrettable features have contributed to lowering the standard of the profession in the eyes of the public, which is not in a position to verify the truth of many of the assertions passed from mouth to mouth. On the other hand, a large section of the drug-trade has for some years past been fighting strenuously to restore the professional status of the pharmacist to the level he is in justice entitled to claim. The fight carried on by these altruists, anxious to clear away the prejudice under which the profession labours, has been an up-hill one; on the one hand, apathy and lack of collaboration among their professional brethren, and, on the other hand, a singular disinclination on the part of the authorities to enforce the law even when flagrantly violated, the latter showing, however, great zeal in proceeding against the reformers should they by chance overstep the bounds of prudence in their well-meaning efforts. Recently the Government has exhibited a greater degree of interest in the matter, and a number of enactments have been passed to ensure an improvement in the conduct of the profession; these include the decree regulating the manufacture and sale of pharmaceutical specialities by registration, the law fixing the working and closing hours in pharmacies, and the decree dealing with the personal responsibility of the pharmacist, or his representative, and attendance in the business. But an even greater step forward is foreshadowed in a measure which contains a provision for limiting the number of businesses. The Minister of the Interior has presented a Bill to the Senate dealing with the public prophylaxis of preventable diseases, article 13 of which establishes the co-operation to be afforded in execution of its provisions by the professions concerned in maintaining the health of the population. This article reads as follows:—

Shall be obliged to afford the following assistance:—

Medical men in practice shall contribute to their utmost to improve the hygienic and health conditions of the country, and shall see that in the case of contagious diseases the family of the patient shall be properly instructed how to isolate such persons and disinfect all contaminated articles.

Medical, pharmaceutical and veterinary associations, both those officially organised and others, shall at all times lend their aid to improve the sanitary services, and shall be empowered to compel their members to fulfil this mission in the interests of public welfare.

The official organisations of these professions shall take care that their members attend to their professional duties in an honourable and ethical manner; this applies particularly to advertisements and offers of services by members of the respective professions.

A Commission, to be specially appointed by the Minister of the Interior, shall, in the interests of the public welfare, investigate and propose the means necessary to reduce professional competition; with special reference to the question of limiting the number of pharmacies.

Members of the above professions dealing with matters affecting health, as well as architects and engineers, shall afford their assistance, according to their special field of knowledge, whenever called upon by the health authorities.

### Indian Spirit Duty Reduced

THE movement in favour of protection for Indian trade which was inaugurated in the Budget of 1921, when cotton manufacturers in Lancashire were penalised with an extra  $3\frac{1}{2}$  per cent. duty over locally manufactured goods, has received a further impetus, but in a direction affecting the trade of wholesale druggists' exporting tinctures, galenicals and other spirituous preparations to India. Our authority for this statement is the "Times

of India" (June 16), which publishes the following Press note at the request of the Bombay Government:

#### A REDUCTION OF DUTY.

At present spirit contained in medicinal and toilet preparations imported from abroad is assessed to duty at the rate of Rs. 21-14-0 per proof gallon, and the same rate of duty is levied in the Bombay Presidency on Indian-made spirit used in the manufacture of such preparations. With the object of encouraging the industrial use of spirit the Government of Bombay have decided to reduce to Rs. 5 per proof gallon the duty on spirituous medicinal and toilet preparations manufactured in the Presidency and Indian States within its geographical limits (including Baroda). This concession is not intended to apply to foreign preparations liable to duty under the Indian Tariff Act.

As regards imports of spirituous medicinal and toilet preparations manufactured in other parts of British India the Government of Bombay are prepared to recover duty thereon at the reduced rate of Rs. 5 per proof gallon provided the same rate is applied to similar products manufactured in the Bombay Presidency and exported therefrom and it is agreed to recover the duty only once, i.e., in the province of consumption and not of manufacture.

It will be seen from the above that the local manufacturer of tinctures and spirituous preparations is thus given a preference of Rs.16-14-0 per proof gallon over the British manufacturer. It may be remembered that when the Imperial Government of India increased the duty on imported spirituous goods in 1921 the Bengal Government immediately notified that spirit used in the local manufacture of medicinal preparations should pay duty at the rate of Rs.5 per proof gallon. It is only natural, therefore, that the Government of Bombay should fall into line with that of Bengal, although they have allowed fifteen months to elapse. Previously locally-made spirit had paid the same duty as imported spirit, but the new order means that preference is given to about ten Indian manufactures of tinctures and pharmaceutical preparations. It also means a great loss of revenue to the local provincial governments, who are evidently permeated with reform schemes. Naturally the desire is to encourage the local manufacture of medicinal preparations, which in the Bengal province at least are making steady progress, as we notice that 43,000 gallons of rectified spirit was issued from distilleries during the year 1920-21 for medicinal, industrial, and scientific purposes, compared with 34,600 gallons for the year 1919-20. Of the amount issued in 1920-21 duty was paid on about 7,800 proof gallons of spirit actually contained in tinctures and medicinal preparations issued from four bonded laboratories in Bengal, which is about 1,000 proof gallons more than in the previous year. It is therefore evident that the English business tinctures and spirituous preparations has fallen away considerably, and a similar result is expected in Bombay. The question now arises: Are British druggists sufficiently enamoured with the Indian drug trade to take up the matter with the India Office and endeavour to obtain some concession, as it looks as if a preference of Rs.16-14-0 per proof gallon on spirituous goods will practically kill the business.

### Linseed and its Oil

WITHIN the past few months the outstanding feature in seed oils has been the retention of a high level of values for linseed oil, and there is no doubt that the remarkable growth of our export trade in this product, chiefly with the United States, has had a good deal to



do with this. In our editorial columns of April 29 last, commenting on the brisk demand for linseed-oil, we explained the circumstances under which the extraordinary American demand was forced on to British crushers, and we suggested that this demand would continue on a good scale, as excellent and timely arrangements had been made on the East Coast to take large quantities of the oil by tank steamers to America. The total quantities thus conveyed to that country from Hull alone were as much as 20,000 tons during the first half of this year. According to the Board of Trade returns, the total U.K. exports for the first five months of the year amounted to 37,171 tons, thus showing an excess of nearly 22,000 tons, compared with the same period last year. The outgoings for April and May were particularly heavy; in fact, well in excess of the total recorded (17,684 tons) for the first quarter of the year. American crushers having been seriously affected by the levying of an onerous import duty on foreign linseed, this proved an important factor in raising the cost of the domestic oil-product to inflated figures, thus placing the British mills in a position to compete freely even on the basis of the considerably higher prices that were established on the home market. The record of prices given below, as current at the close of the two previous years, and those registered early this week for the seed and the by-products give an idea of the effect of the strengthening factors which have governed the industry during the first half of this year—

Spot Prices Per ton	Dec. 31, 1920			Dec. 31, 1921			July 10, 1922		
	£	s.	d.	£	s.	d.	£	s.	d.
River Plate linseed	18	10	0	17	0	0	20	0	0
Calcutta seed	21	0	0	18	0	0	21	10	0
Linseed oil	41	0	0	28	10	0	43	10	0
Linseed cake	18	10	0	14	0	0	12	10	0

Market quotations are now well under those seen in May, when the American demand for linseed-oil, as well as the raw material, was more particularly brisk. The London spot price of the oil then rose to about £45 per ton, this comparing with £41, the extreme highest figure touched last year, against the other extreme of £22. The appreciation from the price ruling at the close of 1921 of £28 10s. has, therefore, been as much as £17 10s. per ton, or proportionately much greater than in the cost of seed, which, after advancing roughly £4 per ton to the neighbourhood of £21 for the River Plate product, reacted several pounds a ton, although it has since rallied considerably under stronger statistical indications. Home crushers have certainly done very well in recent months, having been favoured by the continued heavy premium realised for ready oil. They have thus been well able to recoup themselves for the rather disappointing prices secured for linseed cake, which has been selling lately down to about £12 7s. 6d. per ton, against £14 six months ago and as much as £22 at one period in 1921. There was then a marked scarcity of oil-cake. The position of linseed-oil seems sound enough despite the comparatively inflated price ruling. There has been a continuous scarcity of spot oil, due to the fulfilment of large export contracts for America, and this fully explains the maintenance of heavy premium thereon of about £4 per ton, against the terms ruling on distant contracts. Recently the spot price collapsed to about £39, incidental to a temporary absence of demand and some liquidation by speculative holders under the influence of the slump in linseed to about £18 for the Argentine product. The inherent firmness of the market, however, soon reasserted itself, although there seems to be some little

doubt as to the stability of seed oils generally at the moment. The relationship between the various descriptions of oils and fats admittedly differs greatly, as regards actual merits from consumers' view-point, from what it was in pre-war times, and this is always apt to lead to price adjustments, subject to the law of supply and demand. It must be remembered that economic conditions have been very severely shaken, and that the state of the home trade is still comparatively poor, although it is quietly improving. Continental crushers went ahead very well with their operations the last twelve months or so, but the Continental trade has become uncertain owing to the renewed crisis in the rates of exchange. Linseed crushers, therefore, are more circumspect in covering their needs, although American trade conditions have been decidedly more active. American purchases for shipments from the River Plate having been materially on the increase, this has imparted firmness to the seed market under the hindrance to Calcutta shipments, owing to the labour disturbances there. The River Plate export surplus has now, it is estimated, been reduced to about 300,000 tons, so that conditions threaten to become somewhat tight until the new Argentine crop becomes available over the end of this year. There is, however, always a possibility of the Argentine surplus proving considerably greater than generally estimated, as happened last season, when a discrepancy of as much as 200,000 tons sprung a surprise on the market. Meanwhile, crop prospects are reported good. An increased acreage has been put under cultivation in the River Plate, and given normal weather conditions an increased yield should be well assured. Our total imports of linseed for the six months to the end of June amounted to 192,746 tons, compared with 210,203 tons and 190,163 tons for the same period in 1921 and 1920 respectively, so that this year's returns show a decrease of about 17,000 tons against last year. This is chiefly due to the heavy falling off in Argentina's contributions, although this was offset by the welcome considerable rise in the arrivals from India, which for the five months were 60,165 tons, against only 14,032 tons in 1921. Trivial quantities came from Canada and Russia, and over 10,000 tons emanated from other countries, including Morocco.

#### Assistants' Hours in Denmark

THE long-drawn conflict between owners and assistants in Denmark, in the course of which the latter recently went to the extent of going on strike, has now been settled by an agreement arranged between the Danish association of pharmacists, representing the owners, and the Danish association of pharmaceutical assistants. The hours of work have been fixed as follows:—In pharmacies with one assistant, 55 hours a week; two assistants, 51½ hours; three assistants, 50 hours; four or more assistants, 48 hours. The basic monthly salary of every assistant is fixed at 275 crowns, while the supplement for age is for the present to amount to 212 crowns, liable to variation according to the cost of living. Occasional assistance, e.g., locum tenens, will be paid at the rate of 2.20 crowns an hour, while extra work performed by the regular assistants in the shape of overtime is to be remunerated with 2.75 or 3 crowns an hour. The fact that the pharmaceutical profession in Denmark is overcrowded, and certainly offers no opportunities of giving occupation to all its members, quite apart from the very small proportion of men likely to own their own businesses, has led to the demand by the assistants of limiting in some form the number of entrants to the ranks of the profession. By a separate agreement entered into by both associations, in future not more than one apprentice will be engaged in a pharmacy, an exception being made in the case of businesses employing four or more assistants, in which two apprentices may be kept. A new apprentice may be taken on only three months before his predecessor concludes his examination as a pharmaceutical assistant.



## Insurance Act Dispensing

A Record of matters concerning Chemists' interests in the National Health Insurance Acts

### Reports from Local Centres

#### ENGLAND

**Birmingham.**—The new Insurance pharmacopœia for the Midland area, which supersedes that of 1918, contains several points of difference from it and from its predecessors of 1913 and 1914. (The secretary of the Sub-Committee responsible for these pharmacopœias is Mr. E. Osborne, chemist and druggist). In former volumes the mixtures were calculated for 8-oz. quantities, but in the present work single-dose formulas are given. There are a few additions. A list is given of items which may not be prescribed at the cost of the drug fund, and is followed by a selection of names of proprietary chemicals.

**Blackpool.**—The Pharmaceutical Committee have notified that the following persons have been co-opted members of that Committee: Messrs. John Hadfield Lowe (in place of the late John Laurie) and Wilfred Leslie Mayson (in place of John F. Roberts, resigned). Payments to Blackpool chemists during past quarter totalled £526, and to medical practitioners £2,457.—The Insurance Committee are co-operating in a proposed "Health Week" in October. Mr. D. J. Bailey, chemist and druggist, has been appointed in a sub-committee to confer on the matter.—According to a report to Insurance Committee, "statistical data" prepared by the Pricing Bureau shows that prescriptions issued last year were 50,249, against 49,145 for the previous year; average per prescription, ingredient price, 4.13d. (5.04d.); dispensing fee, 5.51d. (5.14d.); total cost, 9.64d. (10.18d.); and the total cost of prescriptions issued, £2,017 (£2,085).—The Insurance Committee having given notice of a revised dispensing fee for panel chemists as from May 1, communications have been received from nine chemists protesting against the revised scale. These have been forwarded to the Ministry of Health.

**Bristol.**—At the meeting of the Insurance Committee on July 10 the Panel Committee presented a report on the prescriptions for the quarter ended December 31. The average cost per prescription was 10d. or 0.1d. below the average for the S.W. Group. The new edition of the *Bristol Pharmacopœia* came into use on June 1. The Medical Benefits Sub-Committee reported that they have received from the Minister of Health a copy of a letter addressed to him by Mr. J. T. Good, chemist, of 110, Cheltenham Road, Bristol, dated May 8, 1922, applying for reinstatement to the List of Persons supplying Drugs and Appliances in Bristol. While the present service is ample for the insured persons in the district, the Insurance Committee did not raise any obstacle to the reinstatement of Mr. Good. The Pharmaceutical Committee also stated that they raised no objection to the reinstatement of Mr. J. T. Good, in view of the circumstances when the judgment was given. The Medical Benefits Sub-Committee reported that they have received a copy of the Sixth Annual Report and Statement of Account for the year ended December 31, 1921, from the South-Western Joint Pricing Committee (given on page 94). The report was adopted.

**Burnley.**—Statistics of the Insurance Committee, respecting prescriptions issued during 1921, show that the number was 128,966 and the total value £5,048 15s. 6d. The average cost per prescription was 9.39d., and the average cost per person 24.53d. In 1920 131,149 scripts were issued, of the value of £5,371 8s. 9d.; average cost per prescription 9.83d., and the average cost per person 27.22d.

**Portsmouth.**—At a recent meeting of the Insurance Committee, on June 29, a report was presented as to a complaint against a chemist. The patient took an order for 12 sq. in. of jaconet to the chemist, and said he would come the next day for the articles. When the parcel was opened only 5 sq. in. were found. The patient returned to the shop and complained, and when he returned home the same evening he found the right quantity delivered at his house, but without any note

of explanation. Incidentally, at the first meeting in the shop there was a dispute between the parties. A customer wanted a suitable soap for her child's face, and mentioned a particular brand. The chemist said it was "a good soap." The patient, intervening, said he had found it unsatisfactory for the purpose. He advised a cold cream soap, and the customer took his advice. The Sub-Committee reported that the chemist was guilty of an error of judgment in allowing his professional duty to be influenced by the shop incident. He should have clearly explained his inability to supply the quantity of jaconet ordered. The Committee adopted the Sub-Committee's recommendation that the attention of the chemist be drawn to the Sub-Committee's findings.

**Great Yarmouth.**—At a recent meeting of the Insurance Committee a reference was made to the reduction in the fees for dispensing by chemists, and to a protest from the Pharmaceutical Committee that the change is unwarranted and uncalled for. The protest will be sent on to the Minister of Health.

**Leamington.**—The Warwickshire Pharmaceutical Committee met on July 5. A letter was read from the Ministry of Health regarding the decision to allow the full dispensing fee when two or more bottles of the same medicine are ordered on a prescription. Letters were read from Panel chemists taking exception to the reduced remuneration; the secretary was instructed to pass them on to the Insurance Committee. The proposed Group F. Formulary was again under review, and the Committee appointed Messrs. Fleet, Robinson, Williamson, and the secretary to a conference to be held with the Insurance and Panel Committees on the matter. The Central Checking Bureau's report showed that the work of the Pricing Office continued satisfactory.

**London.**—At a meeting of the Pharmaceutical Committee, held on July 11, the following appointments for the year ending June 1923 were made: *Chairman*, Mr. H. Skinner; *Vice-Chairman*, Mr. C. A. Noble; *Secretary*, Mr. G. A. Tocher. The retiring chairman, Mr. J. H. Humphrey, was accorded a vote of thanks for the manner in which he had fulfilled the duties of chairman during his year of office. The various sub-committees were then appointed. The report of the Central Checking Bureau for the month of April, 1922, showed a margin of error of 0.05 per cent. The secretary reported, *inter alia*: (a) The following particulars of dispensing for the months of March and April, 1922:

	March.	April.
Value of ingredients ...	£7,288 8s. 5d.	£6,671 5s. 11d.
Value of dispensing fees ...	£11,213 2s. 3d.	£10,209 9s. 2d.
Number of prescriptions	483,756	441,477
Av. ingredient cost ...	3.62d.	3.63d.
Av. dispensing fee cost ...	5.56d.	5.55d.
Av. total cost per prescription ...	9.18d.	9.18d.

(b) That the position of a chemist on the panel would be considered at the next meeting of the Pharmaceutical Service Sub-Committee. (c) That facilities be afforded to the insured staff of hospitals to make their own arrangements collectively, through the hospital authorities, for medical treatment, including drugs, etc. (d) That the Ministry of Health had decided that, as from June 1, the fee of 2d. now payable in respect of each extra bottle of medicine where the prescription directs more than one bottle to be supplied, will be increased to 5d. A report of a joint conference between representatives of the Panel and Pharmaceutical Committees was considered, and after a discussion further consideration was deferred until the next meeting, which will be held on September 12.

**Middlesex.**—In the supervisors' report for July complete figures are submitted for March, April and May, the last-mentioned month being the first for which prescriptions have been priced in accordance with the reduced fees. As will be observed, there is a drop of almost exactly a penny in the average dispensing fee. The average dispensing fee for April was identical with that for April, 1921—the first month under the new arrangements for that year. During the twelve months—April to April—the average dispensing fee has fluctuated from 5.37d. to 5.67d., the mean figure for the period being



5.52d., or exactly one penny more than the average fee for May last.

Month.	Scripts.	Average.	Prescriptions.	Average.	Drugs.	Fee.
Jan...	134,682	11.35d.	160,126	9.54d.	3.87d.	5.67d.
Feb...	99,747	11.66d.	119,816	9.70d.	4.08d.	5.62d.
Mar...	85,163	11.97d.	104,672	9.74d.	4.17d.	5.57d.
Apr...	74,476	12.14d.	92,479	9.78d.	4.24d.	5.54d.
May...	73,196	10.67d.	91,679	8.52d.	4.01d.	4.52d.

	March.	April.	May.
Number of scripts	85,163	74,476	73,196
" of prescript.	104,672	92,479	91,679
Total value	£4,247 10 11	£3,769 14 2	£3,255 9 1
Average cost per script..	11.97d.	12.14d.	10.67d.
" " " prescript.	9.74d.	9.78d.	8.52d.
" ingred. cost ..	4.17d.	4.24d.	4.01d.
" dispens. fee ..	5.57d.	5.54d.	4.52d.

**Nottingham.**—At a meeting of the Insurance Committee, held on July 10, the Finance and General Purposes Sub-Committee reported that the Minister of Health had decided that, where two bottles of medicine are ordered on one prescription, a dispensing fee of 5d. per bottle should be paid to chemists. The Medical Benefit Sub-Committee had considered an application by the Panel Committee to be allowed to revert to the previous capitation system of payment in respect of emergency drugs and appliances supplied to insured persons by practitioners as from October 1 at the rate of 2s. 6d. per annum per 100 insured patients in industrial areas and 1s. 3d. per 100 patients in other parts. The Sub-Committee appointed to deal with the matter reported "that the high average cost of drugs and appliances in fifteen cases was found to be due to the small number of insured patients on the doctors' lists and that no action is therefore necessary."

**Salford.**—At a meeting of the Insurance Committee, on June 22, it was reported that a petition had been presented by the chemists of the borough against the revised rate of remuneration, which came into operation on May 1, for prescriptions. The petition was in the following terms:

"We, the undersigned chemists on the Salford Panel, desire to register our emphatic protest against the reduction in remuneration forced upon us by the Ministry of Health. The fall in the cost of living has had practically no effect upon the cost of conducting our businesses. Establishment charges (i.e., rent, rates, etc.) are actually higher to-day than when we received our last advances. Wages cannot be reduced if we are to retain the services of the best type of assistant, and it is only right that they should be in a position to enjoy a standard of living commensurate with the responsible character of the duties they are called upon to perform. The efficiency of the pharmaceutical service can only be maintained by constant vigilance on the part of both proprietors and assistants, and we feel strongly that a continuation of the same fees paid to us for dispensing during the past year would have only been a fair and adequate return for the professional services we are called upon to render."

It was stated that at the Sub-committee meeting Mr. Cuttford, chemist and druggist, explained the position of chemists, and furnished figures in illustration of their contention. After discussion it was resolved that consideration of the matter be deferred until the next meeting.

**Sheffield.**—At the Victoria Hall, on June 23, three officials (the presiding barrister and two doctors) heard an appeal from a panel practitioner who had been fined by the Insurance Committee for issuing incomplete prescriptions. The chairman decided that the inquiry should be private, although during the hearing of a previous appeal the public were admitted. Evidence was given by the secretaries of the Panel and Pharmaceutical Committees, the chemist who complained, and various other officials. The Ministry will issue their decision in due course.—The Medical Service Sub-Committee of the Insurance Committee have recommended a practitioner be censured for signing certificates ten days after examination.—The payments to chemists for Insurance dispensing for the month amounted to £1,417 3s. 10d., and for doctors for the quarter £131.

**South-West Joint Pricing Committee.**—The annual report for the year ended December 31, 1921, shows that the number of prescriptions dealt with constitutes a fresh record. The total received for the 12 months ended September 30 was 2,204,066, being an increase of 126,269 over the preceding year. The net cost of pricing prescriptions during the past five years has been as follows:—

	Prescriptions	Cost	Cost per 1,000
		£ s. d.	s. d.
1917	1,815,443	1,831 5 10	20 2
1918	1,796,416	1,779 11 10	19 10
1919	2,058,151	2,318 14 4	22 6
1920	2,077,797	3,324 0 4	32 0
1921	2,204,066	3,642 10 4	33 0

The total amount of chemists' accounts for the year ended December 31 was £93,821 1s. 5d., being a decrease of £1,284 16s. 5d. as compared with the previous year. The decrease in the cost of scripts was due to the general fall in the price of drugs. Ingredient-charges amounted to £43,851 16s., and dispensing-fees to £49,969 5s. 5d. The average cost per prescription was as follows:—

	1917	1918	1919	1920	1921
Ingredient prices...	3.64	4.31	4.56	5.5	4.7
Dispensing fees ...	2.88	3.35	3.80	5.0	5.4

The Retail Pharmacists' Union, acting on behalf of the various Pharmaceutical Committees, has checked about 10 per cent. of the scripts monthly, the percentage of error on balance disclosed being 0.0383, as against 0.067 for 1920 and 0.108 for 1919. The Treasury auditors examined prescriptions and chemists' accounts monthly throughout the year.

**Staffordshire.**—A meeting of the Staffordshire Insurance Committee was held recently, when the Medical Benefit Committee reported that a resolution had been received from the Staffordshire Pharmaceutical Committee protesting against the reduction in remuneration for National Health Insurance work. Similar communications were received from Wolverhampton chemists. It was resolved that copies be forwarded to the Ministry of Health.

**Surrey.**—The report of the Medical Benefit Sub-Committee, presented at a meeting of the Insurance Committee, held on June 28, included the following definition of an urgent prescription:—"A prescription marked 'urgent' is a prescription which the practitioner considers should be dispensed at once, notwithstanding the fact that it is known that the chemists' shops will be closed for ordinary business." The Sub-Committee recommended a surcharge of 5d. in the case of a practitioner who on a Sunday wrote a prescription for sodium bromide, syrup of iron phosphate and water, and failed to avail himself of the opportunity of giving an explanation. Another matter considered was the irregular signing of prescriptions, affecting a firm of three doctors. Out of 453 prescriptions examined it would appear that some 180 were not signed by the practitioners with their own hands. It was recommended that the question be referred to the Medical Service Sub-Committee.

**Walsall.**—Reductions in chemists' dispensing-fees were the subject of a letter of protest received by the Insurance Committee, at a recent meeting, from the local branch of the Pharmaceutical Society. Dr. Hawley said that "they (chemists) could complain as much as they liked; it would not make any difference." The Mayor (presiding) said: "They are not complaining fairly." Dr. Hawley added that the reduction corresponds with that for the doctors. It was decided to send a copy of the letter to the Ministry of Health.

**Wolverhampton.**—The Insurance Committee adopted the new Formulary, and Councillor Coleman (Secretary to the Pharmaceutical Committee) proposed that it should come into force on August 1, to which Dr. Mactier (Secretary to the Panel Committee) agreed. The report for the year ended December, 1921, shows that 81,810 prescriptions were dispensed.

	Year, 1921.	Dec. 31, quarter.
Average Ingredient price ..	4.51d.	4.28
" Dispensing fee ..	5.35d.	5.51

The Committee agreed to adhere to the duplicate prescription form.



## Safeguarding Industries

### Sodium Hyposulphite

Mr. CYRIL ATKINSON,\* K.C., the Referee under Part I. of the Safeguarding of Industries Act, commenced, on July 7, the consideration of a complaint that sodium hyposulphite has been wrongly included in the list of articles chargeable with duty under Part I. of the Act. The complainants were R. W. Greeff & Co., Ltd., chemical merchants, represented by Mr. Kenneth Swan and Mr. R. Lambert Parry. The complaint was opposed by The United Alkali Co., Ltd., represented by Sir Arthur Colefax, K.C., and Mr. Stamp, and by the Board of Trade, represented by Mr. Whitehead.

#### COMPLAINANTS' CASE OPENED

Mr. SWAN, in opening, said that the Board of Trade had prepared a counter-statement, which had been adopted by the United Alkali Co. He did not think that, substantially, there would be much controversy as to the facts, but there might be a good deal of discussion as to the inference to be drawn from the facts, and the way in which those facts should be interpreted. The substance concerned was included in the list with the letter R affixed. It was referred to both as sodium hyposulphite R, and sodium thiosulphate R, and those two names meant identically the same substance. The chemical formula was  $\text{Na}_2\text{S}_2\text{O}_3$ , with five molecules of water,  $5\text{H}_2\text{O}$ . It was closely akin to sodium sulphate, which was  $\text{Na}_2\text{SO}_4$ , and the only difference between the sodium sulphate and sodium thiosulphate was that one atom of oxygen had been replaced by one atom of sulphur. Continuing, Mr. Swan said that the Referee had probably met with sodium hyposulphite in connection with photography. Its uses in industry were numerous; it was used in process engraving, paper making, leather tanning, photography—

The REFEREE asked in which of those uses the R quality was used.

Mr. SWAN said he was coming to that. Sodium hyposulphite was used in dyeing and calico printing, and for medicinal purposes, but in the latter connection its use was almost negligible.

Sir ARTHUR COLEFAX agreed, and said he did not know of any medicinal use of hypo.

Mr. SWAN said it appeared in the British Pharmacopœia as a reagent, but not as a medicine. Hypo was used for extracting silver and gold from their ores on a substantial scale, and also in bleaching, as a means of getting rid of the residues of chlorine. As to the scale on which sodium hyposulphite was used in these various connections, the Board of Trade had not been able to supply figures, but the trade witnesses which he would call would be able to say how far the R quality was used, from their own experience. He believed he would not be far wrong in saying that hyposulphite of soda was used to the extent of over 1,000 tons per annum in this country; that figure was on the low side.

Sir ARTHUR COLEFAX agreed that that was low; the actual production in this country was substantially more than that.

#### HOW HYPO IS MADE

Mr. SWAN said he would not have much to quarrel about with regard to the general statement of the methods of manufacture as set out in the Board of Trade counter-statement. The first process, which was used almost exclusively for a very great number of years, was to recover hyposulphite from alkali waste by treating calcium thiosulphate with carbonate of soda, and, by a simple process, the sodium hyposulphite was obtained from the calcium thiosulphate, the sodium taking the place of the calcium. The second process was by treating sodium sulphide solution with sulphur dioxide gas, and the third was by boiling sodium sulphite solution with sulphur. The Board of Trade counter-statement pointed out that the method of recovering sodium hyposulphite from alkali waste is now obsolete. It was said in the counter-statement that the

special qualities covered by the items in the list were reagent and photographic quality. The ordinary quality used in industry was not comprised within the scope of any of the items. There were three applications which necessitated the use of a better-quality material than was ordinarily used in industry, these being photography, medicine, and analytical work. The distinction between photographic quality and ordinary commercial quality was well recognised, and current market reports differentiated between the two qualities, "photographic P" and pearl crystals being quoted at present at about £19 per ton, and the ordinary quality at £13 per ton. The ordinary quality was generally contaminated with small amounts of sulphates, and occasionally contained traces of sulphides, calcium salts and other impurities, which rendered it slightly off colour. It commonly contained small amounts of mechanical impurities, and excessive moisture. It was common in this quality to find samples assaying over 99.9 per cent. pure. Although the Board recognised that if they had to consider the method of manufacture alone it would be somewhat difficult to justify the view that photographic hyposulphite of soda was a fine chemical (especially were the matter considered on the basis of British practice of, say, ten years ago), the manufacturing processes in respect of this particular substance had been subject to serious changes in recent years, and the Board submitted that, even having regard to the nature of the manufacturing processes alone, hyposulphite of soda of the quality mentioned was, in modern practice, properly considered to be a fine chemical. The Board urged that hyposulphite of soda was produced by firms which manufactured other fine chemicals and appeared in the fine chemical grouping of the Association of British Chemical Manufacturers. It was one of the most important of the photographic chemicals, a class of chemicals specifically mentioned as a subdivision in the trade classification of fine chemicals. It reached a very high standard of chemical purity, and the work involved in producing the pure quality material necessitated an increase of price over that of the industrial material approximating to 50 per cent. It was generally regarded in the trade as a fine chemical. The Board submitted that sodium hyposulphite of reagent and of photographic quality was properly regarded as a fine chemical, and was not improperly included in the list of articles chargeable with duty. Continuing Mr. Swan said that hyposulphite of soda, as manufactured by any of the three processes, could not be regarded on those grounds as a fine chemical. The method of manufacture did not point to its being a fine chemical, but a heavy chemical. Therefore he accepted the Board of Trade statement if that was what was meant.

The REFEREE asked whether, supposing it meant that if they considered the now discarded method it was not a fine chemical, but if they regarded only the methods adopted to-day then it was a fine chemical, Mr. Swan would not dissent from that.

Mr. SWAN said it was so ambiguous, but if that were the meaning he did not agree. His case would be that the second and third methods were just as inconsistent with fine chemical manufacture as the old process of recovery from alkali waste. The statement of the complainants set out that hyposulphite of soda was only used in negligible quantities as an analytical reagent; it was a well-recognised heavy chemical and an industrial chemical; it had never been described in market report or trade lists as a fine chemical, but it was invariably recognised as a heavy chemical; it was manufactured by heavy chemical manufacturers, and was made either as a by-product in alkali manufacture or by simple processes of the usual heavy chemical type. It came into commerce in a very pure condition, and the purest qualities, whether in large or small crystals, were those regularly employed in industrial processes. Sodium hyposulphite, being an inorganic product, was not a synthetic organic chemical; it was not an analytical reagent within the meaning of the Act; it was not a fine chemical within the meaning of the Act; and it was not a chemical manufactured by fermentation processes.



## HYPO MOSTLY IMPORTED

Mr. SWAN said that, as to relative manufacture in this country and importation, again he regretted that accurate figures were lacking. The Board of Trade were not able to supply the figures, but his evidence would be that by far the preponderating amount of sodium hyposulphite consumed in this country came from abroad. As to the manner in which sodium hyposulphite was marketed, it was dealt with in ton lots, and on a large scale, comparable with the manner in which admittedly heavy chemicals were bought and sold, not only in the case of what the Board of Trade admitted to be commercial quality, but also in the case of what the Board referred to as photographic, and which he would refer to as P or pea crystals. The Board of Trade apparently did not suggest that what they called commercial quality was a fine chemical, but they had taken up the position in this case that they had taken up in regard to a large number of other chemicals—that a certain grade or quality of that chemical must be called, or treated as, a fine chemical for the purposes of the Act; and they had inserted the letter R in the list to indicate under what circumstances the chemical had to be so treated. He asked the Referee's attention to the letter R and its signification in the Schedule. In the list it was stated that R signified that the chemical indicated was included only when it was "pure," "puriss," "extra pure," "B.P.," "Ph.G.," "A.R.," "for analysis," "reagent," or when it was of special quality for meeting special tests for purity, and not when it was the crude product. Therefore, according to the language used there, the special quality indicated was a special quality of purity, not a special physical quality. His submission would be that the Board of Trade had no justification at all for putting the letter R against an admittedly heavy chemical such as hyposulphite of soda. The Act only authorised the Board of Trade to place within the Schedule those chemicals which were all within the descriptive language used in connection with chemicals—i.e., the various categories of chemicals, which he would broadly call fine chemicals. Secondly, even if there were any justification for defining some particular brand or quality of an admittedly heavy chemical as a fine chemical, he submitted that the letter R, with these significations attached to it, was an utterly impossible means of differentiation or demarcation between anything that could be considered to be a heavy chemical and a fine chemical. Thirdly, the ground upon which the Board of Trade had presumed to put the letter R against sodium hyposulphite did not justify this action, because the pea crystal photographic hyposulphite of soda was not of purer quality than the commercial. It only differed from the commercial in its physical characteristics—i.e., it was merely a smaller crystal than the commercial. The discussion in this case was obviously going to centre round the one point of whether there was any justification for the letter R, signifying what it was said to signify, being placed against a chemical which was admittedly a heavy chemical. If they assumed that R meant "pure" the effect would be that there was no chemical manufactured in this or any other country which, in its pure condition, would not become a fine chemical. Therefore, if the Board of Trade were right, the Schedule must cover every chemical manufactured under the sun. All that would be necessary would be to put the letter R against it, and it would become a fine chemical.

## WHAT IS "PURE?"

The REFEREE said he rather imagined that a great many chemicals could not be made absolutely pure. The word "pure" might mean that they had in mind chemicals which could be got absolutely pure.

Mr. SWAN said he was instructed that almost every chemical substance could be purified to such a degree that it, at any rate, deserved to be called pure. It was pure in relation to the actual commercial article.

The REFEREE said that in the case of boric acid he believed Mr. Parry had said that if they could get it to absolute purity and remove the last trace of arsenic, which was so difficult to remove that the

British Pharmacopœia did not insist upon it, then they would get something which could be described as a fine chemical. Did not "R" mean that?

Mr. SWAN said it was for that reason he had chosen the word "pure" and not "puriss." The letter R signified a number of different things.

The REFEREE said that if they had "pure," "puriss" and "extra pure," "pure" would mean relatively pure.

Mr. SWAN agreed. Probably the Referee had in mind the statements made by Mr. Hill—that a fine chemical of 99.9 per cent. might not be pure, whereas a chemical 80 per cent. pure, the diluent being water, might be pure, so pure as to be properly classed as a fine chemical. It would be seen what an enormous range the term "pure" would cover in a chemist's mind, and at the same time the extraordinary vagueness and uncertainty of it. How was it practically possible in that way, even supposing it were permissible to do it, to classify one chemical into two independent and distinct grades, one to bear a duty and the other not, by using the word "pure," and saying that the "pure" quality should bear the duty and the other should be free? Every chemical had its own grade of purity. He could understand it being said that any chemical which had a purity of, say, 90 per cent. should be liable to duty as a fine chemical, but to say that a chemical should be deemed to be a fine chemical when it was pure, or puriss, or extra pure, seemed to him so vague as to be absolutely impracticable. The statute could not have contemplated any such arbitrary and unsatisfactory demarcation as that. In the decision of the tartaric acid case the Referee had said: "I think that the paragraph in the Schedule dealing with chemicals is intended to be a description of the fine-chemical industry." He (Mr. Swan) accepted that, and it was the foundation of his submission. The Referee had said that in his view the descriptions used were an attempt to define fine chemicals—i.e., were an expanded description of a fine chemical. He (Mr. Swan) agreed that that was the only tenable view of the meaning of the Schedule—that it was an expanded description of the fine-chemical industry and a fine chemical. The Board of Trade had taken a different, and untenable, view, which was that every chemical must be deemed to be a fine chemical, or had to be classified as a fine chemical, when it had an indefinite degree of purity.

The REFEREE asked whether it was a fact that every known heavy chemical was in the list with an R?

Mr. SWAN said he believed there was every possible chemical there.

Mr. WHITEHEAD asked him to try bleaching powder.

The REFEREE mentioned sulphuric acid.

Mr. SWAN said that all the common heavy chemicals were included with an R. He believed every acid was included with an R. If the Referee's view was correct—that the object of the Safeguarding of Industries Act was to safeguard the fine-chemical industries and the chemicals produced by the fine-chemical industries—was it right to include every chemical and say that when it was pure it must be treated as a fine chemical? He submitted it was not right.

Another question was that analytical reagents were particularly specified in the Act. The Board of Trade, in saying what they meant by the letter R, had said that it meant "A.R." or "for analysis," or "reagent." Did it mean that a tax had to be imposed upon a substance some infinitesimal quantity of which was used for analytical purposes, or did it not mean that analytical reagents were a well-known type of fine chemical? He did not mean to say that all analytical reagents were fine chemicals, but a very large number of them were, just as a very large number of pharmaceutical chemicals were fine chemicals, as well as a very large number of photographic chemicals. He submitted that it was not attempted to be said, in the cases of tartaric acid, boric acid or citric acid, all of which were used for analytical purposes, that they should be included in the list because they were reagents. Equally, he submitted in this case that, because an infinitesimal quantity of hyposulphite of soda was



used for reagent purposes, it could not possibly be treated as an analytical reagent as contemplated by the Acts.

#### EVIDENCE FROM THE TRADE

MR. A. H. GILBERT then gave evidence. He said he was a chemical merchant, with thirty-five years' experience in the chemical market, the first seventeen years of which he was connected with A. J. Luke & Co., Great Tower Street, London. In his experience, sodium hyposulphite was a heavy chemical; he had dealt with it in 10-ton and 1-ton lots. He believed that the only difference between large crystals and pea crystals was in appearance, and did not recognise any difference as to purity. As to price, there was generally a difference of £2 or £3 per ton, the pea crystals being the dearer. The REFEREE: What is the price of large crystals to-day?

MR. GILBERT said it was about £14 per ton, and the pea crystals were £17, or possibly £18. That difference was governed chiefly by the package. It was usual to pack pea crystals in 1-cwt. kegs, and the others in bags or casks, and the packing accounted for the bulk of the difference. Witness produced samples of large and small crystals. The bulk of the hypo he dealt with was sold to wholesale and manufacturing chemists, whilst a large quantity went to tanners, photographic film people, etc. He dealt mostly in the large crystals. He agreed that the pea crystal form of hyposulphite of soda was a heavy chemical equally with the commercial, and he had never heard the pea crystal form described as a fine chemical.

SIR ARTHUR COLEFAX, cross-examining, asked for some indication of the ratio between the large and the pea crystals sold by the witness.

MR. GILBERT said about three units of the large to one of the pea crystals.

SIR ARTHUR COLEFAX, with a view to proving that the price difference between the two qualities was about 50 per cent. (with which witness disagreed), referred to various trade journals. One stated, on May 5, 1922, that the price of commercial sodium hyposulphite was £12 10s. per ton and photographic sodium hyposulphite £18. Witness said that the quotations given in trade papers were erratic. Sir Arthur Colefax said that, at any rate, there was an indication of a difference of something like that to which he had referred. Replying to further questions, witness said that he dealt with both British and foreign sodium hyposulphite. He bought from agents of foreign manufacturers, and did not ask which countries the product he bought from them came from. Sir Arthur Colefax: Do you know a good deal comes from Germany? Witness: I know a great deal comes from Germany, and I should say a good deal of what I deal with comes from Germany.

After handing in, in writing, the amount of hypo he had dealt with this year, both British and foreign, and pointing out that the present was a slack time, and that he did a much larger business previously, witness was asked if he knew that very little foreign hypo was coming into this country at present. He replied that there was very little of any chemical coming in, and the present time could not be compared with an ordinary business period. Answering questions as to the directions in which he disposed of his hypo, witness said he sold about 25 per cent. to the tanners, three-quarters of the balance to the wholesale and manufacturing chemists, and the remainder to the film producers. Questioned as to his remark that there was no difference, except in appearance, between the large and pea crystals, witness pointed out that he had said not to his knowledge. Sir Arthur Colefax: Perhaps you do not know anything about it. Witness: I do not think there is any difference, except in appearance. Sir Arthur Colefax then examined the samples which witness had produced, and pointed out that on the box containing the pea crystals there were the words "Hypo-Photo." It was described as hypo of photographic quality. Witness said that was merely a term. In answer to further questions, he said he had obtained it from a French agent, and agreed that that was his description of it. He handed in invoices to show the difference in

price between the two specimens. Sir Arthur Colefax put a number of questions as to the costs of packing in different containers. What he wanted to get at was that the quotations showed a difference in price. It had occurred to him that, having regard to the respective purposes for which the various qualities were to be used, one was packed in bags and the other was more carefully packed in cases or kegs. Witness said that, as regards the difference in price, naturally, if they were going to take a little more care with an article which was to be put into small packages, so that it looked much nicer, the buyer was prepared to pay a little more for it. Sir Arthur Colefax said he had served his purpose by letting the witness run on. The destiny of the photographic hypo was to be made up into small packages. Therefore, the purchaser did want something which had been carefully protected against impurities. Witness: The small purchaser, yes. Sir Arthur Colefax: When this photographic hypo is packed in kegs, the kegs are paper lined? Witness: Yes. Sir Arthur Colefax said that, in fact, every precaution was taken with the photographic hypo so that it should reach the ultimate purchaser as free from contamination in handling as possible. Would witness agree that the photographic hypo was in the form referred to as pea crystals? Witness said that sold in small quantities was, but he should say that the film people would never pay the extra for the pea crystals. He had always sold them the commercial. He did not recognise the term "photographic quality." He always referred to pea crystals and large crystals.

Sir Arthur Colefax: You have already told me that you recognise it.

The REFEREE said witness had said that he had heard the expression used. Witness remarked that, with all due deference to Sir Arthur, he was getting the two mixed up. They were not the same thing. Sir Arthur Colefax: You have told me that you recognise the expression. Witness: I have heard the expression, but I do not recognise "photographic quality." Sir Arthur Colefax: You want to be understood as saying that the expression "hypo, photographic," is not an expression used in the trade. Witness: No, it is not. After Sir Arthur had referred again to the expression on the box previously referred to, witness said the expression was known to the trade, but between dealers no difference was recognised. Sir Arthur Colefax: You have said you know of no difference in purity between the two grades. Do you know what it the respective purity of these two? Witness: No. Sir Arthur Colefax: Do you think your answer was of any value? Witness: That is a matter of opinion. Sir Arthur Colefax: We can form ours. What do you suggest as the reason why people pay several pounds a ton more for one quality than the other? Witness: The chief reason is that they do not know the difference between the two. They think there is a difference. Sir Arthur Colefax: Merely their extreme folly? Witness: That is my opinion.

#### MR. BUTLER GIVES EVIDENCE.

MR. A. F. BUTLER (director of R. W. Greef & Co., Ltd.) said he had been connected with the firm for twenty years. They were wholesale chemical dealers, and had nothing to do with manufacture. The firm handled sodium hyposulphite, and in his experience that was a heavy chemical, and had been treated as such. A copy of the firm's price-list for July, 1914, was produced. This dealt with chemicals under various headings—technical, fine, pharmaceutical preparations, etc. Sodium hyposulphite was under technical and under photographic chemicals. Under the heading of "technical chemicals" large crystals were mentioned, at £5 12s. 6d. per ton, in 6-7 cwt. casks; £6 15s. per ton in 1-cwt. kegs, prismatic pea crystals; as against that, the latter were 10s. per ton less in 5-6 cwt. casks. With the two forms of chemical packed in substantially the same manner, therefore, there was a difference, between the £5 12s. 6d. and £6 5s., of only 12s. 6d. per ton. Under "photographic chemicals," there were three quotations, namely, £6 15s., £6 12s. 6d., and £6 10s., depending on the quantity. Before the war the firm handled about 50 per cent. of large crystals and 50 per



cent. of pea crystals, but at the present time the pea crystals were handled principally. To the best of his knowledge, said witness, the difference between the pea and commercial was the difference in form. The commercial quality was sold to tanners principally, and, to a smaller extent, to the textile trade. The pea crystals went to photographic firms and to chemists. He regarded the terms "pea" and "photographic" as synonymous. After references had been made to a number of trade journals in order to show that sodium hyposulphite was mentioned under the heading of industrial chemicals, witness referred to the difference in price between the pea and the commercial qualities. This was accounted for partly by the packing, and also because the pea crystals were a nicer looking form.

Answering Sir Arthur Colefax, who asked whether he knew the actual degrees of purity of the commercial and the pea crystals as a matter of analysis, witness said he knew what was often guaranteed. His firm bought foreign-made hypo principally, and he agreed that there was not much foreign-made hypo coming into the country now. Very large quantities came in before the war, of both qualities. In reply to another question, witness said that photographic firms bought pea quality almost entirely. He also agreed that in his experience photographic firms were particular about the substance, and demanded a high degree of freedom from contamination.

SIR ARTHUR COLEFAX produced a price list of Messrs. Greeff, of January 1922, of fine chemicals and pharmaceutical products, and he found "Sodium Hyposulphite, Rhodia," at 20s. per cwt. Witness said the Rhodia crystals were a particular brand. Sir Arthur Colefax asked why they were mentioned under the heading of fine chemicals. Witness said that was because that list was the only one issued to manufacturing chemists at the present time, and it had a general heading of "Fine Chemicals and Pharmaceutical Products," but there were included in it such heavy chemicals as were sold to those trades. Sir Arthur Colefax said that in January 1922, when the firm were making a distinction in their price lists between technical chemicals and other chemicals, they did not put the sodium hyposulphite in the technical chemical list, but when they issued a list of fine and pharmaceutical chemicals they put it into that. So far as the recipient of the price list was concerned, it was pretty obvious that he would think that the firm were treating it as a fine chemical. Witness said that did not follow at all. He admitted later, however, that the recipient might be able to draw a deduction from that. Witness then picked out some heavy chemicals which were in the list of fine and pharmaceutical chemicals, such as oxalic acid, formaldehyde, milk sugar, and citric acid. Sir Arthur Colefax said that the vast majority were indisputably fine chemicals.

Asked by the Referee to pick out a heavy chemical from the list, about which there had been no difference of opinion as to whether it was a fine or heavy chemical, witness said he believed oxalic acid was one.

SIR ARTHUR COLEFAX suggested that a reasonable person would perfectly properly draw the inference that Messrs. Greeff were treating sodium hyposulphite as a fine chemical. Witness: I do not accept that. Sir Arthur Colefax: They speak for themselves.

#### PHOTOGRAPHIC TRADE EVIDENCE.

MR. R. J. KINDON (Chas. Zimmermann & Co. Photographic, Ltd.) said he had been connected with the firm for twenty-five years, and had had experience in the merchandising of sodium hyposulphite during the whole of that time. He did not regard it as a fine chemical; he recognised it as being sold as commercial crystal and pea crystal. When he said he did not regard it as a fine chemical, he did not draw a distinction between the two grades. In his experience it was always treated in the trade as a heavy chemical. Reference was made to trade journals in which hyposulphite of soda was referred to amongst heavy chemicals. He was concerned with the photographic trade entirely, and the hypo he sold was almost entirely in the pea crystal form. The classification of pea crystals with heavy chemicals was in accordance with his own view and with his experience of trade usage.

IN THE CHEMIST AND DRUGGIST for July 2, 1921, sodium hyposulphite pea crystals were referred to under the heading of heavy chemicals, in 1-cwt. bags. Commercial crystals were also referred to. Witness said that he had sold the larger crystals to photographers in the early part of this year, but pea crystals were mostly used. His firm had introduced a very fine pea crystal years ago. He did not believe the pea quality was purer than the commercial.

SIR ARTHUR COLEFAX: Do you know? Witness: I am not a chemist. Continuing, witness said his firm never sold hypo under a guarantee. He handed in a price list issued by the firm for photographic purposes, which contained both heavy and fine chemicals, the proportion of each being, roughly, half and half. He had never heard sodium hyposulphite referred to as a fine chemical.

Cross-examined by Sir Arthur Colefax, witness said it was probably twenty years ago when his firm commenced to sell the special variety of pea crystals he had referred to. He would not agree that that particular form of hypo had a very high degree of purity. It was made by the A.G.F.A., of Berlin, and was called "Agfa" hypo. He had a letter from the makers, written in May of this year, in which it was referred to as a commercial article. They only made one quality, and that was recognised as the commercial quality. The letter set out the quality. Sir Arthur Colefax asked for a letter which would show the percentage of purity before the passing of the Act, and asked also whether witness was prepared to deny that since the Act came into force the percentage had altered. Witness did not believe that for a moment. Sir Arthur Colefax: Do you know that the standard of the commercial quality of hyposulphite is higher than what is stated in that letter? Witness: No. Sir Arthur Colefax asked whether, in photographic hypo, a very high standard of freedom from apparent contamination was demanded by its users. Witness did not agree. Sir Arthur Colefax: Do you know that it is common experience that if the sodium hyposulphite sold as being of photographic quality is not water-white it is returned? Witness: No. Sir Arthur Colefax then handed to the witness two samples of hypo, and asked whether he would be surprised to know that one had been rejected for photographic purposes because of its colour. Witness said he would; it was his opinion that the user was unduly stringent in his demand.

Answering further questions as to whether he agreed that for hypo of photographic quality a water-white product was demanded, witness said he did not like the term "water-white." He agreed that very great whiteness was demanded, and regularity of size of crystal. Freedom from dust was also demanded, but the users never got it.

SIR ARTHUR COLEFAX then handed to witness a sample of commercial hypo (which witness said was a very bad sample). It was not made by the United Alkali Co., said Sir Arthur. He pointed out that the crystals were very large, and there was a good deal of adherent moisture. Freedom from adherent moisture was demanded in photographic hypo. Witness: So it would be in commercial. Sir Arthur Colefax suggested that there was a substantial difference in the amount of water with the photographic hypo compared with the commercial. Witness said he did not know whether he agreed, having regard to the enormously increased surface in the one case as compared with the other. He was not chemist enough to say. Sir Arthur Colefax asked whether transparency was demanded in photographic crystals. Witness: Clearness, yes. He agreed that they did not get that in the commercial. Continuing, witness would not agree that the pea crystal was not the commercial. He believed they were the same chemically. Sir Arthur Colefax: That belief is based on nothing? Witness: It is based on experience.

THE REFEREE said he understood the position was that there had never been any demand made to the witness for anything purer than the commercial quality. Up to 20 years ago he was supplying the commercial, but the fine crystals were introduced, not because there was a demand for something purer, but because it looked nicer. It was not to meet a demand? Witness said that was correct. He had never been asked for a particular degree of purity. Some questions were put by the Referee with reference to the "Agfa" commercial hypo, and he asked



why it was specially stated to be commercial. Witness replied that he had written to the A.G.F.A., of Berlin, asking them, if it were of commercial quality, to say so specifically, for the benefit of the Customs. At the same time, however, the Customs examined the hypo, and he had to pay the tax. He mentioned that he had asked Dr. Fox, who had made the test, what tests had been applied, but he had absolutely refused to give any details. The Referee: So that you were unable to form an opinion as to whether you were justly taxed or not. Witness said that was the case.

After the luncheon interval, the Referee remarked that no one knew what degree of purity brought sodium hyposulphite within the scope of the letter R. The stuff was analysed, those concerned were not told what the analysis was, and nobody knew whether their stuff was properly taxed or not.

#### EVIDENCE OF MR. JOHN BROWN.

MR. JOHN BROWN (Brown & Forth, Ltd., chemical merchants) said he had had thirty-one years' experience of the trade, and had businesses in London, Manchester and Brussels. He had handled sodium hyposulphite, but had not arrived at any decision as to whether it was a fine or a heavy chemical. To him chemicals were chemicals; there were certain degrees of purity, and there was an end of it. He had never heard it referred to as a fine chemical. Sir Arthur Colefax: Or as a heavy? Witness agreed. Continuing, he said he sold hypo to tanners, to those who retailed it to photographers, which would include many distributors in the shape of manufacturing chemists, and others. He always bought what he considered to be the best at the lowest price. He was not at present buying pea crystals, because they had to face a tariff. Previously he had dealt with both commercial and pea crystals. Referring to the sample of commercial hypo which the previous witness had said was a bad sample, Mr. Brown said he did not think it would be any good to anybody. If he were a tanner he would reject it, and tanners only used the large crystals. It appeared to contain too much iron. He did not recognise any difference between the commercial and the pea crystals. There were needles, pea, and pearl, all different in form. He sold on sample only, and not on guarantee, and all the hypo he was dealing with at the present time was manufactured abroad. The difference in price was attributable to packing principally.

SIR ARTHUR COLEFAX, cross-examining, asked whether the sample which had been referred to as a bad one would not be a perfectly good delivery. Witness replied that he would have nothing to do with it. Sir Arthur Colefax suggested it would be a perfectly good delivery if commercial hypo were ordered, without specifying anything further.

THE REFEREE: Supposing you had an order from a tanner for a ton, would you consider yourself entitled to send that? Witness: No, I would not have it on the premises. The Referee: Supposing you did, do you think the tanner would be entitled to reject it? Witness: I certainly do.

Cross-examined by Mr. Whitehead (for the Board of Trade), witness agreed that the phrase "photographic form" was a well-recognised term. He did not think that photographers preferred a particular form because it indicated purity. Answering questions as to price, he said it was not for him to say why a man paid more for a thing than he need do.

MR. WHITEHEAD: As a brother Lancastrian, they do not pay more than they need in Lancashire? Witness said he was afraid they did, in many walks of life. Finally, he expressed the opinion that the photographer bought hypo in the pea form because he thought it was best for photographic purposes, but did not know anything about it.

#### A QUESTION OF REPORTING.

MR. O. F. C. BROMFIELD (secretary of the British Chemical Trade Association) said he was in close touch with the commercial chemical market. He had been compiling market reports for the "Chemical Trade

Journal" for some years. He classified sodium hyposulphite amongst the industrial chemicals. Asked whether that was a practice adopted since or prior to the passing of the Act, witness said it had been the practice since he had been writing the reports since 1919. Asked by the Referee for proof that his classification was of value, witness said that in his position as secretary of the Merchants' Association he was in close touch with many of the merchanting firms, and he was able to obtain information, as an impartial person, as to what they were dealing with. He had only been in touch with the chemical trade since 1915. Continuing, he said he compiled his reports on trade custom and usage. They were based on information received, both verbally and by post, from many of the leading firms in the country. As to the principle on which he put a substance into the heavy chemical group and not into the fine chemical group, he said he obtained his information of heavy chemicals from heavy chemical merchants, and that of fine chemicals from the fine chemical merchants. Sodium hyposulphite was included in the list of "industrial" chemicals, not "heavy" chemicals, but he often used the term "heavy chemical" when commenting upon the state of the market. The two terms were synonymous to a certain extent. He believed the term "heavy" was more a trade term than anything else. The Referee asked whether every industrial chemical was heavy? Witness replied that he should think so. He could not think of any exception at the moment. Replying to further questions, he said he had always adopted the same view as to the position of hypo. He had taken the opinion of leading men in the trade, and he had never been requested by anybody in the trade to alter it. Pea crystals he always put in as industrial chemicals.

SIR ARTHUR COLEFAX cross-examined, first, with regard to whether or not witness knew of a fine chemical which was used for industrial purposes. Witness repeated that he could not call one to mind, but there might be. Sir Arthur Colefax mentioned silver nitrate. Witness said that he had not had occasion to report on that. After further questions, Sir Arthur said that if witness would say that his knowledge was so limited that he could not say, he would accept it. Witness, however, would only say that there might be. The Referee said the witness did not profess to know very much about chemistry. He meant that among the chemicals he reported on all the industrial chemicals were heavy. Witness agreed, and added that he was only concerned with those important to the merchanting trade. Sir Arthur Colefax said that where they had the headings "Industrial," "Pharmaceutical," and "Coal tar products and intermediates," they could not put hypo anywhere but in the industrial class. Witness agreed.

#### MR. PARRY GIVES EVIDENCE.

MR. E. J. PARRY (B.Sc.) then gave evidence on the technical side. He agreed that the processes of manufacture mentioned in the counter-statement were accurate, but was of opinion that they should have added that sodium hyposulphite was also made to some extent from the sulphur residues in dye works. Most of those manufacturing hypo were typical heavy chemical manufacturers. As to the forms in which it came on the market, it was ordinary sulphate of soda with one atom of oxygen replaced by one atom of sulphur. The real difference between the commercial and the pea crystals was in form. The smaller crystals dissolved more rapidly, and were much more attractive in appearance. Chemically the two were so nearly identical that it would not be exaggerating to say that they were identical. He had never made a sample of the ordinary fresh commercial hyposulphite of soda of less than 98.5 per cent. purity. Sometimes he had had occasion to analyse hypo, but it did not come to the analyst very frequently because it was of such uniform purity. One used it to a small extent in a laboratory, but one tested one's own samples. The only differences in processes of production depended upon crystallisation. There had been a demand for a good-looking crystal. To illustrate what he meant by saying that the commercial and pea crystal qualities



were identical, he mentioned that in Regent Street could be seen bath salts in elegant packages, and those salts, although identical with those which could be obtained elsewhere, cost about twice as much. Also, in the case of Glauber's and Epsom salts, there were differences in the sizes of the crystals, there being the feather quality, which cost more than the others. There were three varieties of Epsom salts, large, small, and feather crystals. They were all absolutely identical. In permanganate of potash there were three or four varieties of crystals. Substantially, the difference between the two forms of hypo was only in appearance. The ordinary commercial hypo would never be accepted as commercial hyposulphite of soda unless it was bought on sample. He put the difference in purity between pea and large crystal hypo as about 0.5 per cent. The chief difficulty in the making of hypo was not in the crystallisation. Filtration was undoubtedly an operation which required attention, but only mechanical skill was required, because, unless the solution were kept at the right temperature and concentration, the filters became blocked. There was a third variety of hypo, which practically only existed in minute quantities, and which had been re-crystallised several times to try to get it up to 100 per cent. purity, but this was sold at about 2s. 3d. per lb., and it was quite a rarity. It was used, and very stupidly used, as an analytical reagent, because the commercial hyposulphite was as good as the best for analytical purposes; that sounded paradoxical, but it was correct. Hypo decomposed so rapidly in solution that the solution must be tested every day. In the British Pharmacopœia there was an appendix of reagents employed for testing. Sodium thiosulphate for reagent purposes was specified as "of commerce, pure." Asked as to in what proportion hypo was used in this country for various purposes, Mr. Parry said that probably 50 per cent. was used for the photographic and kinematographic industries, then came the tanning industry, a certain amount in the bleaching industry, and the other uses were small. There was practically none used for medicine.

With regard to a passage in the Board of Trade counter-statement, in which it was said that, of the applications mentioned, there were three which necessitated the use of a better quality material than was ordinarily used in industry, namely, photography, medicine, and analytical chemical work, witness said it was incorrect to mention photography, because the hypo used for photography was not of better quality. Even if it were 0.5 per cent. better than the industrial quality, it would not make any difference, because it was thrown away after use to a large extent. In medicine it was hardly used at all, and in analytical chemical work the quantity used was so minute as to be negligible. If he had to use it for any purpose he would buy commercial.

Replying to the Referee, Mr. Parry said he believed that, if they had a dozen samples of each class of hypo, commercial and pea crystals, and they analysed each one, they would find them go up and down; in some cases the commercial would be above the other, and in other cases *vice versa*. Some makers actually guaranteed their commercial hypo at 99 per cent. Continuing, he said that, so far as he knew, the makers in this country were the United Alkali Co., who had taken up the manufacture of a few fine chemicals. There was also Brunner Mond & Co., who were typical heavy chemical makers, and who made nothing but heavy chemicals; the South Metropolitan Gas Co. made hypo, but their works were closed down at the moment; there were works at Cleckheaton making it, which were typically heavy chemical works, and he believed British Dyestuffs made it from the sulphur residues of the dyes. On the Continent, two or three houses which made a large number of fine chemicals had gone into the manufacture of sodium hyposulphite and two or three other heavy chemicals, because, he presumed, they wanted to keep the trade in photographic chemicals together. A man selling photographic chemicals had to sell them all. Coming back to the Board of Trade statement, witness said it was in-

accurate to say that hypo was made by firms manufacturing other fine chemicals, in this country. As to photographic chemicals being fine chemicals, he disagreed, because there was a large number which were not. With regard to its reaching a very high standard of chemical purity, he did not think it could be produced of less than 98 per cent. strength, except by absolutely careless manufacture. As to the statement that the work involved in producing the pure quality material necessitated an increase in price over the industrial material approximating to 50 per cent., that was very exaggerated, the market prices to-day being approximately £18 and £14 respectively. Of the difference of £4 per ton, packages amounted to at least £2, thus bringing the difference down to £18 and £16. He would say that the real extra value for the trouble of making it would be £1 per ton. As to its being generally regarded in the trade as a fine chemical, if the word "fine" were changed to "heavy" that statement would be correct; it never had been regarded in the trade as a fine chemical.

Referring to literature, Mr. Parry said that in Keily's Chemical Trade Directory for 1919, the makers of sodium hyposulphite did not appear under the "Fine Chemicals" heading. He mentioned, incidentally, that he had not a copy of the directory with him; all his books were disappearing in the course of the inquiries. In a report on heavy chemicals for the Argentine Republic hypo was dealt with, and a number of advertisements were produced with a view to showing that it was regarded as a heavy chemical. SIR ARTHUR COLEFAX said he did not dispute that commercial hypo might well be a heavy chemical. The advertisements really did not help to decide anything between the parties.

(To be continued.)

## German News

**HELPING THE VICTIMS.**—The "Pharmazeutische Zeitung" (Berlin), reports that the workmen and staff of E. Merck, Darmstadt, together with the owners, have decided to work daily during a whole week for an extra half-hour, the resulting wages and salary to be devoted to covering the cost of transporting starving Russian children from the Volga district to Moscow. The journal adds that it is to be hoped this example will be followed.

**GERMAN EXPORT LEVY REDUCED.**—The Imperial Minister for Economics reduced the levy on a number of chemicals from April 25. The following products are affected; against each the new duty is indicated, representing the percentage levied on the value of each product on exportation: Borax, 0 per cent.; iodides ammon., potass., and sodium, 1; iodoform, 3; litharge, 1; tin oxide, 1; Schweinfurth green, 0; gold chloride, gold and sodium chloride, and all gold salts, unless otherwise specified, 1; tin salts and other salts of tin not specifically enumerated, 1; bismuth salts, 3; minium, 1; artificial sweetening agents, 0.

**A SIGN OF THE TIMES.**—Under the foregoing title a Berlin medical journal reproduces a circular sent by a firm styling itself "German-American chemical firm" to Berlin medical practitioners, in which they are offered a discount of 10 per cent. on all purchases made by them, as well as a commission amounting to 10 per cent. on all purchases made by customers introduced by medical men, "without these customers having to pay higher prices than any other customer."—What is more striking is the fact that it should be necessary to remind the Berlin medical practitioners of the existence of the medical courts of honour to deal with such breaches of professional conduct and violation of the Prussian medical law which prohibits any arrangements with pharmacists and druggists. Or is the fact that there may be a weakening of the high standard of Prussian professional dignity which necessitates drawing attention to this "more American than German proposal" also a sign of the times?



## Trade Report

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garhling and the like. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities.

42 Cannon Street, E.C.4, July 13.

At the moment it is difficult to create interest in the Mincing Lane produce markets, principally owing to the continued violent fluctuations in the European rates of exchange, which render export business quite uncertain as to whether a profit or loss will be made. If rates could be stabilised, or even remain steady for a month or so, business would decidedly improve, but with a daily fluctuation of several hundred marks either way international trade between the Continent and ourselves is brought almost to a standstill. An auction of drugs is to be held next week, which will afford a test of market capabilities. Stocks of some of the leading drugs are now at a much lower level than they were when the last auction was held, these including Sumatra benzoin, ipecacuanha, rhubarb, sarsaparilla, senna, and turmeric. The few changes of the week include cheaper offerings of new crop senega to arrive. First hand stocks of buchu are concentrated to one source, "outside" parcels having been cleared, and the tendency is upwards. Balsam peru is easier; menthol is steady, and Japanese camphor is very quiet. The Board of Trade returns issued on Wednesday indicate a decided improvement in the June exports of drugs, chemicals, dyes, and colours, the total amounting to £1,785,111, an increase of £786,546 compared with June last year; of the above amount £204,024 represented drugs, medicines and medicinal preparations, or £54,890 more than a year ago.

Higher	Firmer	Easier	Lower
Acetone	Lactic acid	Acetanilide	Bergamot oil
Caraway oil	(B.P.)	Balsam peru	Cloves (Zan.)
Caraway seed	Methyl alcohol	Clove oil	Farina (Jp. and
(Dutch)	Potash chlorate	Coconut (desic.)	Dutch)
Citronella oil	Sarsaparilla	Coconut oil	Hydroquinone
(Ceylon)	(red native)	Cream of tartar	Lemon oil
Cod liver oil	Sodium	Cubeb oil	Milk sugar
Linseed oil	prussiate	Geranium oil	(Dutch)
Saffron		Hemp seed	Orange oil
Sugar		Hexamine	Palm oil
		Lime oil	Pimento
		(dist) (W.I.)	Rosemary oil
		Oxalic acid	Senega (Sp.)
		Pepper	Soda ash (home
		Sandalwood	trade)
		oil (E.I.)	Spike oil (Sp.)
		Senega	Vanillin
		Sodium nitrate	Wormseed oil
		Spruce oil	
		Tartaric acid	
		Thymol	

A Drug Auction will be held next Thursday, July 20.

### Cablegram

NEW YORK, July 12.—Business is fair. Menthol is dearer at \$6.25 per lb. Cartagena ipecacuanha has advanced to \$1.60, and podophyllum root (mandrake) is also higher at 13 c. Round buchu has advanced to \$1.10 per lb., and milk-sugar to 21 c. per lb. Mexican sarsaparilla is cheaper at 37 c. per lb., and senega is also cheaper at 85 c. per lb.

### Crude Drugs, etc.

AGAR AGAR is steady, No. 1 Japanese offering at 4s. 6d. per lb. on the spot, and at 4s. 3d. c.i.f. to arrive. No. 2 is 4s. 3d. on spot and 4s. c.i.f. to arrive.

ANTIMONY.—The supply of ordinary brands of British refined is more restricted, but the market is quiet at £27, while special brands are held for £29 10s. Foreign regulus rules steady, being in narrow compass, with sellers about £24 10s. ex warehouse, and c.i.f. offers are heard of at about £23 10s. Higher terms are asked for shipment of Chinese crude at £16 to £16 10s., but spot lots are obtain-

able at a little below £15. Small lots have come to hand lately from the Far East.

BALSAMS.—Maranham Copaiba of B.P. quality is steady at 2s. per lb. Peru is easier at 8s. 6d., and tolu is firm at 2s. 9d.

BENZONIN was in better demand during June, 118 packages leaving the drug warehouse, while imports were 7 only, leaving a stock of 962 packages, against 2,018 at the end of June, 1921.

BUCHU remains firm, good clean green round leaf offering at 3s. 6d. per lb., and other qualities 1d. to 2d. less, according to colour and amount of stalk.

The exports from the Union of South Africa during March, 1922, amounted to 19,432 lb. (£2,523), against 10,310 lb. (£1,939) for March, 1921. During the three months ended March 31, 1922, the exports were 30,438 lb. (£4,001), against 22,762 lbs. (£4,107) for the corresponding period of 1921.

CALUMBA.—There was evidence of more buying last month, deliveries from the drug warehouse amounting to 980 bags, there being no imports. The stock at the end of June stood at 16,616 bags, against 20,163 bags at the same period of 1921.

CAMPHOR (CRUDE).—The spot value is about 3s. 6d. per lb., and for June-August shipment 3s. 1d. c.i.f. is quoted.

CAMPHOR (REFINED).—Japanese 2½ lb. slabs continue quiet, with spot sellers at 3s. 6d. per lb., and for July-August shipment 3s. 4d. c.i.f. is quoted. 400 cases have arrived from Japan.

CASCARA SAGRADA.—The London stock at the end of June stood at 69 tons, against 54 tons in 1921. The landings in June amounted to 69, and the deliveries to 31 tons.

COCA LEAVES.—The exports from Java during January to March, 1922, compared with the corresponding period of 1921 were as follows:—

To—	1921 Kilos	1922 Kilos
Netherlands ..	255,844	198,752
Great Britain ..	57	—
Singapore ..	4,700	—
Japan ..	101,433	130,772
	362,034	329,524

COD-LIVER OIL.—Our Bergen correspondent writes on July 5 that the demand has slightly improved, which fact occasioned sellers to advance the price. It is said that 5 kroner more per barrel has been paid since last week. The official quotation for finest new non-freezing steam refined oil is 95s. per barrel c.i.f. London, with some sellers up to 98s. Whether this attempt to advance prices will succeed is questionable, in consideration of the large quantity of oil produced this year. It is said, however, that a Norwegian factory has absorbed a much greater quantity of the unfiltered oil, instead of whale oil, which it generally uses. The London spot price is about 105s. per barrel for finest non-freezing, steam-refined Lofoten.

ELEMI.—During the month of June 40 packages were delivered from the drug warehouse, leaving a stock of 1,227 packages.

HEN YOLK continues quiet, with spot sellers of prime Chinese (2 per cent. boric acid) at 120s. Parcels to arrive (1½ per cent. boric acid) are quoted 97s. 6d. c.i.f. for July-August shipment. Dried yolk is offered at 5½d., sprayed whole egg at 7½d., and native dried whole at 6d. Prime Chinese new albumen on the spot is 3s. 5d. to 3s. 6d., and July-September shipment is 3s. 1d. c.i.f.

IPECACUANHA.—During the month of June there were no arrivals beyond 9 bales of East Indian; the deliveries during the month were 29 Matto Grosso and 15 East Indian. The stock is now very meagre—only 288 packages (206 Matto Grosso, 48 Minas, 5 Cartagena, and 29 Minas), against a total of 584 packages at the end of June last year.

MENTHOL.—Small sales of Kobayashi-Suzuki continue to be made at 24s. per lb. on the spot, and for July-August shipment sellers quote 22s. c.i.f.

MERCURY.—There has been no special feature, the demand generally having been restricted, while comparatively few small lots are wanted for export. The demand on home account is strictly from hand to mouth. A fair supply of Italian is available, and fair quantities of Spanish are held in second hand. Quotations have remained at about £11 10s. to £11 15s. per bottle.

RHUBARB.—During the month of June the deliveries from



the drug-warehouse amounted to 45 chests and the landings to 101 chests, leaving the moderate stock of 692 chests, against 1,113 chests in June, 1921. Market is steady and prices unchanged. Good flat Shensi is 5s., and sales of bold round three-quarters good pinky fracture have been made at 5s. Canton is 4s. 6d. to 4s. 9d., and rough round High-dried is 2s. 2d. in two-case lots. Flat High-dried is 3s. 6d.

**SAFFRON.**—Finest Valencia has advanced to 110s. per lb., with lower grades down to 103s.

**SARSAPARILLA.**—With the small stocks of native Jamaica on offer good bright red is held for 1s. 11d., and mixed red and grey for 1s. 9d. per lb. The landings in London during June amounted to 55 bales, and the deliveries to 60 bales, leaving a stock of 160, against 732 bales.

**SENEGA.**—New crop for delivery in about four weeks is quoted at 3s. 5d. per lb., c.i.f., and on the spot 4s. 4½d. is quoted.

**SHELLAC.**—The deliveries for the past month having turned out considerably better than generally expected, and arrivals over the end of the month having been comparatively small, there was again a decrease in the stocks for June, amounting to 277 cases, making the total 11,818 cases, this comparing with 8,149 cases a year previous. The tone has been steady but quiet throughout, the spot value of usual standard T.N. orange quality closing on Wednesday at 370s. per cwt. Superfine orange is 475s., fine seconds orange 400s., R.L.I. 440s., A.C. cakey 340s., and G.A.L. 315s. For August delivery of T.N. sellers quote 365s., and October has been sold at 360s. to 352s. 6d. To arrive, July-August shipment is quoted at 360s. c.i.f.

**STARCH PRODUCTS.**—Japanese farina is lower. No. 1 afloat has been sold at from 25s. to 25s. 6d. per cwt. c.i.f. Dutch farina is also easier at 30s. per cwt. on the spot. Sellers of pure English rice starch crystals quote £44 per ton and Continental at £33. American maize starch powder in bags has sellers at 14s. 6d. per cwt. on the spot.

**STROPHANTHUS SEED.**—Genuine Kombe offer at 2s. per lb. **SUGAR** is firm, and on Monday the London market for refined was advanced 1s. per cwt.

**TURMERIC.**—During June the deliveries from the drug warehouse amounted to 26 tons. The arrivals being nil, the stock is much less—939 tons against 1,026 tons in June last year.

**WAX (VEGETABLE).**—Carnauba is firm at 92s. 6d. per cwt. for fatty grey and 87s. 6d. for chalky on the spot. Recent sales to arrive include fatty grey at 85s. c.i.f. Japanese vegetable wax is dull at 87s. 6d. per cwt. and 74s. c.i.f. to arrive.

#### Seeds, Spices, etc.

**CHILLIES** are little offered; fair Mombasa can be had at 165s. to 170s. per cwt.

**CLOVES** are dull and rather cheaper, fair Zanzibar were offering at 1s. 1d. per lb. on the spot early in the week, but on Wednesday were steadier at 1s. 1½d. To arrive, prices are also lower, July-September shipment offering at 10d., and for October-December delivery 7½d. c.i.f. has been paid.

**COCONUT (DESICCATED)** continues dull, with fine and medium Ceylon offering at 38s. per cwt. on the spot, which has been paid. To arrive, July-August and August-September shipment has been sold at 36s. 6d to 36s. 9d. c.i.f., with some pressure to sell.

**GINGER** is still in fair demand. The sales include sound Cochin at 60s. to 65s. and wormy at 45s. to 47s. 6d. Sierra Leone is slow, and can be had at about 40s., and 36s. to 38s. in Liverpool. Small sales of Jamaica have been made at very full rates.

**PEPPER** closed easier last week, with spot sellers of fair black Singapore at 4d. per lb. To arrive, July-September and August-October have been sold at 3½d. c.i.f. Tellicherry to arrive is quoted at 43s. c.i.f. and Aleppy at 41s. 6d. c.i.f. Lampong on the spot is 4½d., fair Tellicherry 4½d., and Aleppy 4½d. White Muntok has spot sellers at 7½d.; for July-September and August-October shipment 6½d. c.i.f. has been paid, and buyers. White Singapore has spot sellers at 6½d., and August-October shipment is quoted at 6½d. c.i.f. d.w.

**SEEDS.**—The following are current spot quotations: Spanish ANISE 85s. per cwt., and Russian 71s. CANARY SEED is steady. Mazagan, 95s. per quarter; Larache,

75s. to 77s. 6d.; Spanish, 110s.; fine bold Tangier, 105s.; small Tangier, 95s. CARAWAY SEED is very scarce and dearer at 80s. for Dutch on the spot and 60s. for Morocco. CUMIN SEED is 85s., DILL SEED 25s., FENNEL SEED 57s. 6d. per cwt. FENUGREEK SEED scarce at 14s. to 14s. 6d. per cwt. Manchurian HEMP SEED, 16s. per cwt. Moroccan LINSEED is unobtainable on the spot. MUSTARD SEED 30s. to 35s. per cwt. for English.

#### Essential Oils

The movements in exchange, as well as a good demand for some of the cheaper oils, have resulted in numerous price changes. Ceylon citronella has been largely bought; caraway oil is dearer, and Sicilian oils are lower; Spanish rosemary and spike are also cheaper. American wormseed is offered at more advantageous prices. The following oils show an easier tendency: Clove, cubeb, Bourbon geranium, distilled lime, East Indian sandalwood, and spruce oils. Quotations for aromatic and synthetic chemicals are not always representative of the selling prices, this being attributable to keen competition among the holders for orders. Coumarin is fairly steady and vanillin is cheaper.

**ANISE (STAR).**—"Red Ship" is steady at 2s. 4d. per lb., although small lots are quoted 2s. 6d. The c.i.f. price is 2s. 8d. to 2s. 9d., with re-sellers at 2s. 6d.

**BERGAMOT** has declined considerably. The chief reason is the fall in the value of the lira, the actual price of the oil being only about 7 lire per kilo. below that ruling a few weeks ago. On the spot, offers of 37 to 39 l.a. have been made this week at from 14s. to 14s. 6d. per lb., at which prices business may be done in some directions. Up to 15s. 6d. is quoted. For shipment 14s. to 14s. 6d. c.i.f. is about the figure.

**CAJUPUT** continues in good demand at from 3s. 3d. to 3s. 6d. per lb., spot, according to quantity.

**CAMPHOR.**—White essential is unchanged at 80s. per cwt., in drums; brown, s.g. 1.017 is 75s.

**CARAWAY.**—Dutch distilled continues to advance, and some importers are inclined to withhold quotations. Crude is reported sold at over 10s. per lb. There are limited supplies of double rectified at 12s. 6d.

**CASSIA.**—For small spot lots 80 to 85 c.a., 4s. 9d. per lb., is reported paid. Holders are quoting 4s. 8d. for several cases.

**CEDARWOOD.**—Sales of American in drums are reported at 1s. 7d. per lb., which is a slight increase in value. Holders are quoting 1s. 7d. for drums and 1s. 9d. in cases.

**CINNAMON.**—Ceylon leaf is nominal at 5½d. per oz. Mysore leaf oil (high percentage) is lower at 7s. 3d. per lb.

**CITRONELLA.**—Ceylon has been in active demand. There appears to be very little now offering. Fair sales have been made at 2s. 2d. to 2s. 4d., and 2s. 6d. is since reported paid. The market closes firm at 2s. 6d. per lb. Offers for shipment are difficult to obtain, and 1s. 10d. to 1s. 10½d. c.i.f. has been bid according to time of despatch. For June shipment, now afloat, 2s. 2d. c.i.f. is asked. Relatively, Java oil is very cheap at 2s. 10½d. per lb.

**CLOVE.**—Spot is cheaper at 7s. 6d. per lb., net for Mysore and 8s. for English distilled.

**CUBEB.**—Dutch distilled is easier at 28s. to 32s. per lb., according to quantity.

**EUCALYPTUS.**—For B.P. oil 70 to 75 per cent. cineol, 1s. 5d. to 1s. 6½d. per lb. is asked. Higher percentages are: 1s. 8d. for 75 to 80 and 1s. 10d. for 80 to 85. *E. citriodora* is 8s. per lb., and *E. amygdalina* is 1s. 2½d. to 1s. 3d.

**GERANIUM.**—The decline in exchange rates is responsible for cheaper spot quotations in some directions, holders quoting from 20s. 6d. to 22s. 6d. per lb. It is stated that on replacement prices Algerian should fetch about 42s., but some spot holders will sell at 35s., and even less.

**LEMON** is lower on spot at from 2s. 10d. to 3s. per lb., according to seller. The price to arrive is 2s. 10d. to 2s. 11d., c.i.f.

**LEMONGRASS.**—On the spot Cochin is quoted 2½d. per oz., which would be shaded. For September-October shipment 2½d. c.i.f. is asked; buyers at 2-3/16d.

**LIME.**—Sales of West Indian distilled have been made



at 2s. 1½d. per lb., which is easier. Spot quotations are 2s. 1½d. to 2s. 3d., according to quantity.

**MINT.**—Japanese dementholised, Kobayashi-Suzuki, is steadier at 5s. 3d. per lb., for spot. For shipment 4s. 10½d. to 5s. c.i.f. is asked.

**NEROLI.**—There is a spot offer of good quality French oil at from 25s. to 30s. per oz.

**ORANGE.**—Sicilian sweet has been in demand at the lower prices of 11s. 6d. to 12s. per lb. for spot or c.i.f. to arrive. West Indian sweet is steady at 10s. 6d. to 11s.

**PALMAROSA** is quoted at from 15s. to 16s. per lb. for pots.

**PATCHOULI.**—Penang is cheaper at from 35s. to 37s. 6d. per lb., spot. Mysore is quoted at 40s.

**PEPPERMINT.**—American tin oil is steady at 9s. 6d. to 9s. 9d. per lb., spot.

**ROSEMARY.**—Spanish is cheaper at 1s. 9d. to 2s. per lb., according to quantity.

**SANDALWOOD.**—Mysore Government oil is 27s. 6d. per lb., for B.P., in 5-case lots. In other directions, B.P. quality, East Indian is easier at 25s. to 26s. West Indian is quoted at 17s. to 17s. 6d. and West Australian is 20s., spot.

**SASSAFRAS.**—Genuine American is quoted at 5s. 6d. per lb.

**SPEARMINT** is steady at 15s. per lb., on the spot.

**SPIKE.**—Spanish is easier as a result of competition, spot having sold at 3s. 4d. to 3s. 8d. per lb., according to quality. There are sellers at these figures in ton lots.

**SPRUCE** is easier at 5s. 6d. per lb.

**VETIVER.**—Bourbon is quoted at from 21s. to 22s. per lb., for spot. Java is obtainable at 48s. per lb.; double rectified is 65s.

**WORMSEED.**—American is cheaper at 14s. per lb., for spot.

#### Aromatic and Synthetic Chemicals, etc.

**BENZYL ACETATE** is offered at 3s. per lb. **BROMSTYROL** is quoted at from 7s. to 9s. per lb., according to holder. **COUMARIN** is unchanged at 11s. to 11s. 3d. per lb. For **HELIOTROPINE**, 5s. 6d. to 6s. per lb., is asked, which can be shaded in some directions. **METHYL ANTHRANILATE** is uncalled for at 6s. 6d. to 7s. per lb. **METHYL SALICYLATE** is unchanged at from 2s. 3d. to 2s. 6d. per lb. **SAFROL** is steadier at from 3s. 2d. to 3s. 3d. per lb. **TERPINEOL** is quoted at 2s. 1d. to 2s. 4d. per lb., according to origin. **VANILLIN** is cheaper at 35s. per lb. These quotations are for spot.

#### Pharmaceutical Chemicals, etc.

A RATHER nervous tone prevails in this market owing to the position of the German rate of exchange. Prices on spot, however, are fairly well maintained, with only one or two slightly easier rates being quoted. Business does not seem to have been quite so good.

**ACETANILIDE** is still quoted at about 1s. 3d. to 1s. 4d. per lb., but sales would probably be at slightly lower rates.

**AMIDOPYRIN** remains at 17s. per lb. as a nominal quotation.

**AMMONIUM BENZOATE** stands quoted at 4s. per lb., but no business is reported at that rate.

**ASPIRIN** stands steady and is a good market at 2s. 10d. to 3s. per lb.

**BARBITONE** is still idle and is freely offered at varying rates round about 10s. per lb.

**BENZOIC ACID** holds at 1s. 6d. and upwards per lb., but there is not much doing.

**BENZONAPHTHOL** remains flat, with offers varying round about 5s. per lb.

**BETANAPHTHOL.**—Resublimed is nominal at 2s. 6d. per lb.

**BENZALDEHYDE** (.03) is now steady at last week's cheaper price of 3s. per lb.

**BROMIDES.**—A quieter tone prevails, and although quoted prices are unchanged, the market is not so firm. Ammonium, 11d. to 1s.; Potassium, crystals and granular, 9½d. to 10d. per lb.; Sodium, crystals and granular, 9½d. to 10d. per lb.

**CALCIUM LACTATE** is easy as offered at 2s. 2d. to 2s. 3d. per lb. on a dull market.

**CHLORAL HYDRATE.**—Duty paid is held at 4s. 9d. per lb., but the demand has not improved.

**CITRIC ACID.**—On spot B.P., crystals are in restricted supply and worth about 2s. 5½d. per lb. The forward position is as last reported. The demand on spot continues slower on account of the dull weather.

**CODEINE** remains firm, the pure crystals offering at 14s. per oz.; phosphate at 10s. 6d.; hydrochloride and sulphate at 11s. 9d. per oz. net.

**CREOSOTE.**—B.P., holds steady on a quiet market at 2s. 9d. per lb.

**CREOSOTE CARBONATE** is seldom inquired for and is quoted at about 9s. to 10s. 3d. per lb.

**GUAIACOL CARBONATE** has not improved in demand and is offered irregularly at from 8s. 3d. up to 9s. per lb.

**HEXAMINE** is again easier this week, with offers down to 3s. 1d. per lb. on a dull market.

**LACTIC ACID.**—To arrive, B.P. quality is rather higher at 3s. 6d. per lb. c.i.f.

**METHYL SALICYLATE** stands steady at 2s. 4d. to 2s. 6d. per lb., with the demand moderate.

**METHYL SULPHONAL** remains sluggish, with offers easy round about 15s. per lb.

**MILK-SUGAR.**—Dutch of B.P. quality in cases is easily offered at the cheaper rate of from 105s. to 107s. 6d. per cwt., and less for quantity. American, in barrels, is 105s.

**MORPHINE.**—The makers' basis price remains at 8s. 6d. per oz. for hydrochloride powder and 8s. 9d. for crystals. **PARAFORMALDEHYDE** averages about 3s. 3d. per lb. on quotation, with some said to be down to 3s. per lb.

**PARALDEHYDE** is a weak market, with spot available from 1s. 3½d. to 1s. 6d. per lb., according to seller and quantity.

**PHENACETIN** holds at last week's easier price of 5s. per lb., but the market is not at all active.

**PHENAZONE** continues flat, with 7s. 3d. per lb. asked.

**PHENOLPHTHALEIN** remains at 3s. 6d. per lb., with occasional demand only.

**PIPERAZINE** on spot is plentiful, with the market uninterested; quoted at about 3s. 6d. per oz.

**POTASSIUM PERMANGANATE, B.P.**—There is a good demand, with sales round about 8d. to 10d. per lb. for granular and 9½d. upwards for crystals.

**POTASSIUM SULPHOGUAIACOLATE** remains lifeless and nominal at 5s. 6d. per lb.

**RESORCIN** is steady, but not at all active, at 7s. per lb.

**SALICYLIC ACID, P.B.**, is steady and moderately active at 1s. 5d. to 1s. 6d. per lb. as to quantity.

**SALOL** is unchanged at 2s. per lb.; not much doing.

**SILVER NITRATE.**—The price of crystals on July 12 was based on a metal price of 35½d. per oz., as follows: In quantities of 25 oz., 2s. 3½d. per oz.; 50 oz., 2s. 2½d.; 100 oz., 2s. 2½d.; 250 oz., 2s. 1½d.; 500 oz., 2s. 1½d.

**SODIUM BENZOATE** is quite steady at 1s. 6d. to 1s. 9d. per lb.

**SODIUM DIETHYLBARBITURATE** seems to be of no interest, and is offered at about 17s. to 18s. per lb.

**SODIUM SALICYLATE.**—Prices are maintained, although business has been poor; powder, 1s. 10d. to 2s. per lb., and crystals 1s. 10d. to 2s. 1d. per lb.

**SULPHONAL** remains slack, with offers round about 14s. 9d. to 15s. per lb.

**TANNIC ACID.**—Leviss is maintained on a dull market at last week's easier price of 3s. 3d. per lb.

**TARTARIC ACID.**—Both spot and forward positions are about the same as last reported, with the demand slower owing to the cooler weather. On spot, about 1s. 5½d. per lb., less 5 per cent.

**TERPENE HYDRATE**, on a slow market, is offered at 2s. per lb.

**THYMOL** is slightly easier at about 20s. per lb.

**PHOTOGRAPHIC CHEMICALS.**—There is no change except for hydroquinone, which is a shade easier at 4s. to 4s. 3d. per lb., the lower price being for one-cwt. lots. Business is not at all brisk. **Amidol** is irregular and is quoted at 8s. 10d. to 10s. **Metol** varies from 11s. to 14s. 6d. per lb., the lower price being for cwt. lots. **Pyrogallol** acid crystals offer at 5s. 11d. up to 6s. 2d.

#### Industrial Chemicals, etc.

London, July 12

LITTLE or no change has taken place in the market for industrial chemicals during the past week, the only item of importance being the lower price of soda ash to home consumers by the makers. Business has been generally rather quieter, especially for export.

**ACETIC ACID** on the spot stands very firm and in good demand, with supplies well taken up as they arrive; 80 per cent. technical, about £39; 80 per cent. pure, about £44; and 98 per cent. glacial, about £64 per ton in casks and demijohns, ex wharf London.



**ACETONE.**—British Government specification has advanced and holds firm at £70 per ton. It is not unlikely to go still higher.

**AMMONIUM (ANHYDROUS)** is maintained at level figures on the week at 1s. 10d. per lb. for 99.95 per cent., with fair inquiry about.

**AMMONIUM MURIATE** is steady at 33s. per cwt. for grey galvanising.

**AMMONIUM SULPHATE** continues to be inquired for for export with not much available; price is about £17 per ton as to destination.

**ARSENIC.**—Consumers are not very keen in providing for their requirements, despite evidence of more stringent conditions incidentally to the shortage of supplies. Trade stocks are believed to be very restricted. Quotations for white Cornish powder range upward of £42 per ton, delivered London, so far as selling agents are concerned but purchases are possible at less.

**BARIUM CHLORIDE** (98 to 100 per cent.) is maintained at about £22 to £22 10s. per ton, with little doing.

**BLEACHING POWDER** (35 to 37 per cent.). Prices are unchanged and seem steady at £12 to £13 for home trade and about £13 for export.

**COPPER-SULPHATE.**—The demand for export is only moderate, and, in fact, not so good as it had been for some time past, and this, presumably, accounts for the more divergent state of the market between the chief manufacturing districts. Quotations vary from about £27 10s. f.o.b. for casks, less 5 per cent., down to about £26 10s. The demand from France has slackened, and there is not much doing for the home trade.

**CREAM OF TARTAR.**—The spot position as regards price is just a shade easier at about 114s. to 115s. per cwt. for B.P.; the forward offers stand as last reported.

**FORMALDEHYDE** on spot is now in very restricted supply, and the price is firm at £68 per ton.

**GLAUBER'S SALT.**—Commercial quality is dragging on the market; there is plenty of material about, with some offers at very low rates; about £4 to £4 10s. per ton is the average price asked.

**LEAD ACETATE** is in occasional small demand, with rates unchanged at brown broken, £35 to £36, and white crystals, about £40 per ton.

**LITHARGE.**—British pure flake steady at £36 per ton, with imported at £34, c.i.f. London.

**OXALIC ACID** is a shade easier at 8d. per lb., and still quiet.

**POTASSIUM BICHROMATE** remains quiet, with values at about 6½d. to 6¾d. per lb.

**POTASSIUM CHLORATE** has been in a little better demand, and is a shade firmer at about 4½d. to 4¾d. per lb.

**POTASSIUM PRUSSATE** is firm at 1s. 5½d. per lb. for yellow, with spot supplies very limited.

**SAL AMMONIAC** is steady at unchanged rates; a fair demand has been felt: dog-tooth crystals, 55s.; medium-sized crystals, 55s.; fine white crystals, 33s. per cwt.

**SALTCAKE** is in good supply but poor demand at from £4 to £4 10s. per ton.

**SODA ASH** (58 per cent. light alkali) on the spot is unchanged on the week at: Spot, London, £9 10s., and Manchester, £8 10s. per ton, with very little doing and not much about. Makers' prices to domestic consumers on contract is now down to £7 17s. 6d. per ton.

**SODA CAUSTIC.**—No improvement in demand is recorded and the spot market is still weak at 70 to 72 per cent., £21; 75 to 77 per cent., £23 per ton in drums, ex wharf, shipping port. Makers' prices to domestic consumers on contract are unchanged at 70 to 72 per cent., £20 10s., 76 to 77 per cent., £22 10s. per ton.

**SODA CRYSTALS** from British makers is steady at £6 per ton in bags, carriage paid to destination.

**SODIUM ACETATE** on spot is steady at about £23 to £24 per ton, for which there is but small demand.

**SODIUM BICARBONATE** continues in moderate demand at about £11 5s. to £11 10s. per ton. British makers selling for home trade only at £11 per ton delivered.

**SODIUM BICHROMATE** is maintained at about 5½d. per lb., but there is not much doing.

**SODIUM CHLORATE** has improved a little and is now fairly steady at 3½d. to 3¾d. per lb.

**SODIUM HYPOSULPHITE.**—Pea crystals have been quieter of late, but the price for spot parcels is so far maintained at about £19 10s. per ton. Commercial is quoted at about £14 per ton, with little doing.

**SODIUM NITRATE** has been rather quieter at about £15 per ton for 96 per cent.

**SODIUM PRUSSATE** is at slightly higher rates on spot with nothing offered below 10½d. per lb., going up to 11½d. Spot supplies are hard to find at the moment.

**SODIUM SULPHIDE** is unchanged and in some small demand, 60 to 62 per cent. solid, about £20 per ton in drums; 60 to 65 per cent. concentrated in casks, at about £21 per ton.

**COAL TAR PRODUCTS, ETC.**—This market shows no change on the week. Business has been rather slow. Pitch stands very firm as quoted. ANILINE OIL AND SALT are still lifeless, with values nominal at 1s. per lb., packages free. PITCH is firm as quoted at 75s. per ton. PURE METHYL ALCOHOL is firmer, with nothing below £64 per ton, ex wharf, London, now offered. CRESYLIC ACID is now very firm, and is quoted at 2s. 3d. to 2s. 4d. per gallon, naked, at makers' works. CREOSOTE OIL is still at the old rate of 6d. per gallon. CARBOLIC ACID CRYSTALS are unchanged on a quiet market at 5½d. per lb., f.o.b. United Kingdom. PYRIDINE is flat at 5s. 9d. per gallon. HEXAMETHYLENE is unchanged at 3s. per gallon. NAPHTHALENE holds steady at level figures, with some inquiry, at £17 per ton. Crude, £4 to £7; balls, £25; candles and tablets, £34 per ton, packages free.

### Fixed Oils, etc.

LINSEED OIL continues to be a good market, closing at slightly higher rates. Turpentine is maintained at a high level with very little doing. Palm oil is quieter and at lower rates. Other products have been dull throughout the week. ACID OILS: Prices are fairly well maintained, although not so firm as last week: Coconut, 34s. 6d.; palm-kernel, 34s. 6d.; groundnut, 34s. 9d. CASTOR OIL is steady. Pharmaceutical, 57s.; First Pressings, 52s.; Second Pressings, 50s. per cwt. in barrels in not less than 1-ton lots. COCONUT OIL: The spot market has been flat and spot prices for Cochin at 43s. and Ceylon at 40s. 6d. are easier, with deodorised unaltered at about 49s. COTTONSEED OIL: Values are quoted even on the week, but the spot market has been very dull; deodorised, 50s.; common edible, 47s.; soapmaking, 45s.; crude, 41s. 6d. GROUNDNUT OIL: Deodorised on the spot is steady but slack at 57s.; crude Oriental for shipment has recovered to 47s., c.i.f. LINSEED OIL: The premium on spot delivery has been fully maintained, due to the limited quantities that crushers have to spare. The home demand has not been very active, but the undertone is firm, the outlook in seed being rather against crushers. (The position is dealt with in our editorial column.) Raw naked, on spot, 44s. 6d. per cwt.; July, 42s. 3d. to 42s. 6d.; July-Aug., 42s. 6d.; Sept.-Dec., 38s. 3d. to 38s. 6d.; Hull, cn spot, 44s.; July, 42s. 6d.; July-Aug., 42s.; Sept.-Dec., 38s. 3d. PALM-KERNEL OIL: Deodorised is now steady on spot at 49s., and crude Oriental is easier at 40s.; market has been flat. PALM OIL has eased off in buyers' favour and has been flat; Lagos, 34s. 9d.; Softs, 33s. 6d.; Hards, 32s. RAPE OIL continues dull with values unaltered; refined, 57s.; and crude, 49s. SOYA BEAN OIL: A better tone prevails with prices now quite firm; deodorised, 48s.; crude Oriental, 40s. TURPENTINE.—Fluctuations have not been quite so wild as in recent weeks, but the statistical position is very strong, holders of the remnants of the stocks being difficult to deal with in view of the uncertainty as to future arrivals. The stock of American spirit is certainly dangerously low, although it is understood that a parcel of French came in last week of about 1,000 barrels, which was naturally attracted by the big rise. On spot market closes at 104s.; July, 104s.; July-Dec., 92s.; Sept.-Dec., 89s.; and Jan.-April, 89s.

### French Chemical Products

Paris, July 8.

OUTSIDE of alkaloids, of which the supply available is considered hardly adequate, the tendency of pharmaceutical products on the French markets has been rather dull, with



prices here and there in buyers' favour. On the other hand, the opium derivatives have tended upward very strongly, partly due to the restrictions imposed. There has been a constant growth of demand for bleaching material and dyes of all kinds, and the development of business in that direction, as well as painters' materials, has been the best feature of the chemical trades. The activity of demand also shown by glassmakers had not been altogether expected at this time of year, and caused the stocks of chemicals needed for this industry to be reduced. Some of the makers, especially of artistic glass and fancy bottles, are now disposed to increase their output. In spite of the big advance already recorded in turpentine, amounting in three weeks to 110 fr. to 125 fr. per 100 kilos, a further rise is talked of on the strong American reports. In soap products, more vigorous trading is noted, due to the increased demand from makers of dyes and bleaching material. This has influenced the demand for soap-oils, also tallow, and owing to the absence of "stock" worth mentioning, the mills have increased their pretensions. Yet some hold the view that prices have risen far enough, unless unforeseen events occur, while outside competition, especially on German account, is apt to cause slight reactions in values, although under the much improved outlet, some further hardening in prices is quite possible. Some of the quotations now current are approximately as follows:—

Kilo (except where otherwise stated).	Kilo (except where otherwise stated).
Antipyrine .. 515m.	Nickel oxide .. 12 to 13 fr.
Arsenic, white pulv. .. 2.20 fr.	Phenacetin .. 550m.
Benzonaphthol (lb.) .. 6s.	Phenolphthalein .. 40m.
Bismuth sub-nitrate .. 53.50 fr.	Potass. bromide .. 8.00 fr.
Bismuth salicylate .. 57 fr.	Potass. chlor. .. 2.50 fr.
Boric acid cryst. .. 3.25 fr.	Potass. iodide .. 90 fr.
Caffeine (lb.) .. 15s. to 16s.	Potass. permang. .. 7 to 8 fr.
Chloral hydrate .. 12.50 fr.	Pyranidion (lb.) .. 24s. to 25s.
Chloroform .. 10 fr.	Quinine sul-plate .. 220 fr.
Citric acid .. 12 to 13 fr.	Sodium arsen. .. 3.50 fr.
Cocaine hydrochlor. .. 1,350 fr.	Sodium bicarb. .. 0.90 fr.
Codeine .. 1,190 to 1,200 fr.	Sodium borate .. 2.20 fr.
Creosote (lb.) .. 3s.	Sodium sulphate .. 0.60 fr.
Digitalin cryst. (gram) .. 125 fr.	Sodium benzoate .. 55m. to 60m.
Formic acid, chem. pure .. 3.50 to 4 fr.	Sodium cadocylate .. 130 fr.
Glycerophosphate, lime (lb.) .. 7s. to 8s.	Sodium methylarsenate .. 6,000 fr.
Glycerin .. 5 fr.	Sodium salicylate .. 120m.
Guaiacol cryst. .. 65 fr.	Sodium phosphate .. 2.75 to 3.00 fr.
Iodoform .. 120 fr.	Salicylic acid .. 142m.
Magnes. sulphate .. 1.20 fr.	Sulphuric acid ord. (per 100 kilos) .. 15 to 17 fr.
Menthol (lb.) .. 22s.	Sulphuric acid, pure (per 100 kilos) .. 138 to 146 fr.
Methyl salicylate .. (lb.) 2s.	Tartaric acid, pwd. cryst. .. 6.50 to 7 fr.
Morphine hydrochlor. .. 725 fr.	

### German Chemical and Drug Markets

THE demand to cover requirements in the home market remains brisk (says a Hamburg report of July 1), although the orders placed are for smaller amounts, thus showing the caution observed in view of the unsettled state of affairs. In consequence of the depreciation in the value of the mark there has been a considerable increase in export business. Prices reflect the political situation, and are likely to fluctuate wildly in the near future. The following quotations are in marks, per kilo:—

ACETIC ACID (glacial 98 to 100%).—A few large foreign orders have caused the price to firm up to m. 75; for export m. 85. Owing to scanty supplies 80 per cent. is firm at m. 60; for export m. 65.

BALSAM PERU.—Genuine original, is very scarce and firm at m. 1,250. Ordinary commercial and Ph. G.V. is in brisk demand at m. 450. For export special quotations in the currency of the importing country.

BENZALDEHYDE (almost free from chlorine, for food-stuffs).—The regular demand is being maintained, but no large transactions have taken place. Offered at m. 160 for home use.

BORAX is firm, and since its price depends upon the rate of exchange it is likely to advance in the near future. Offered at m. 44 for crystals, and m. 45 for powder, exclusive of barrels.

CAFFEINE pure crystals have been in demand at m. 2,100; for export m. 2,000, and stocks are getting low.

CAFFEINE SALTS are neglected at m. 1,200.

CITRIC ACID.—In consequence of the recurring increases in price by foreign manufacturers (German manufacturers can only sell forward), the quotation continues to advance steadily, and it now fetches m. 350; for export m. 245.

CREAM OF TARTAR (98 to 100%) is being dealt with in small

amounts only at m. 145; for export m. 160. No large transactions have taken place owing to small stocks and the absence of sufficient supplies from manufacturers.

COUMARIN has been in large demand by foreign purchasers at m. 1,300, and is now getting scarce. Orders from the home market may possibly be filled at m. 1,200.

GLYCERIN.—Orders have increased since the last reduction in price by the manufacturers. Ph.G.V., 28°, double distilled, is quoted at m. 100; for export m. 110 (sp. gr. 1.23). An advance in price is certain to take place.

HELIOTROPINE.—Only small amounts have been purchased at m. 900.

MENTHOL is scarce and firm at m. 4,000 for orders of a case at least; broken bulk m. 4,200.

MILK SUGAR.—In addition to a satisfactory demand from the home market at m. 110, there is an increased demand for export at m. 150.

SALICYLIC ACID.—Considerable transactions have taken place at higher prices, and it is very firm at m. 185; for export m. 225, while supplies are scanty.

SANTONIN is one of the most scarce, dearest and greatest in demand of the articles on the drug market, and m. 110,000 is being willingly paid.

SODIUM BENZOATE has been in brisk demand and has advanced to m. 210.

SPIRMACEIN.—Best white is offered at m. 240, which has been paid.

STAR ANISE.—M. 105 has been paid for parcels in transit.

TARAXACUM.—A few remaining parcels have been purchased for export at m. 44.

TARTARIC ACID.—Manufacturers have been able to supply only a portion of the large orders received, and consequently the market is very firm in view of the large orders coming in. Quoted at m. 200 for crystals, and m. 205 for powder; for export crystals fetch m. 220, and powder m. 235.

VANILLIN has advanced to m. 4,600; for export to m. 5,000, and is in very brisk demand.

### The Reappearance of *Salvia Sclarea*

Owing to the war, the French plantations of *Salvia sclarea* (sweet clary) were neglected, and for some time past it has been impossible to obtain the essential oil distilled from the flowers of this plant, as much as 2,500 fr. being demanded for one kilogram of essential oil. M. R.M. Gattefossé, who was responsible for introducing this valuable perfume, now states that it will again be obtainable. Since its introduction, the essential oil of *Salvia sclarea* has made a triumphant progress, and it is even predicted that it will be more extensively used than oil of rose, since its addition to practically every perfume adds materially to its quality. However, it is in the manufacture of eau de Cologne that it reigns supreme, to which its odour, resembling that of muscatel, imparts a beautiful fragrance. It is capable of being put to many uses, and in a few years' time it will be impossible to believe that a time existed when this perfume was unknown to manufacturers.

### Italy's Mineral Production in 1921

THERE have just been published statistics relating to Italy's mineral output for 1921. A comparison with 1913 shows that last year's production of manganese, pyrites, mercury, lignite, rock and marine salt, bitumen, bauxite, leucite, boric acid, asbestos, barytes, colouring earths, magnesium earths and refractory materials was each higher than in 1913. On the other hand, the production of iron, copper, lead and zinc ores, sulphur, petroleum, alum, graphite, pumice, talc and silicic sand was each under the 1913 output. The table below gives the production of the Italian mines and quarries for 1921 of products of chemical trade interest, and the percentage of that production compared with 1913:—

Products.	Tons.	Per cent. of 1913.
Manganese .....	4,700	290
Mercury .....	1,070	106
Sulphur .....	313,400	77
Rock salt .....	45,400	109
Salt, marine .....	45,300	255
Petroleum .....	4,780	72
Bitumen .....	600	152
Ichthyol-bearing schists .....	1,100	55,000
Alum .....	1,170	19
Bauxite .....	49,100	706
Leucite .....	9,900	618
Boric acid .....	2,490	103
Graphite .....	5,750	51
Pumice stone .....	10,900	72
Asbestos .....	427	240
Talc .....	21,000	87
Barytes .....	13,500	104
Colouring earths .....	10,900	145
Magnesium earths .....	9,400	1,566
Sand, silicic .....	173,000	45
Fluor-spar .....	1,600	—





### The Dovedale Excursion

SIR,—Mr. Mellor's letter (*C. & D.*, July 8, p. 71) is most courteous and full of interest. I am obliged to him for the additional information which so unfortunately escaped me. I am sorry he was not with me upon any of the occasions when I visited Dovedale, and I can only hope that Conference visitors will be more fortunate and have him as a guide.

Yours very truly,

R. CECIL OWEN.

### Tablespoonfuls or Tablespoonsful?

SIR,—“Cochleare” (*C. & D.*, July 1, p. 35) is surely correct in advocating “tablespoonfuls”; the customary dropping of the final (or second “l”) should alone prove his assertion. I consider it is better still to employ the hyphen and write table-spoonfuls, a method equally applicable in the case of tea-spoonfuls. Additional emphasis might be given if desired by the underlining of the word “table” or “tea.”

Yours faithfully,

Liverpool.

H. C. M. (4/7).

SIR,—Concerning the meaning of “Cochleare” and the suggestion that the plural of tablespoonful must be tablespoonfuls, I oppose the fact that tablespoonful is a substantive and must take the plural ending of substantives and does not take the plural form in the middle of the word. In the Flemish language, which has in many directions similarities with the English language, it is the same, and although our Flemish language does not contain in a Flemish form the corresponding term for tablespoonful, we have in our tongue similar words for mouthful (*mondsvol*), handful (*handsvol* or *handvol*), which make the plural by adding the plural affix “en” and doubling the final consonant “l”—e.g., *mondvollen*, *handvollen*. With kindest greetings.

Antwerp.

OSCAR VAN SCHOOR.

### The Tobacco Habit

SIR,—Referring to the observation of “Xrayser II.” (*C. & D.*, July 1, p. 17), which begins “Exaggerated Statements” and refers to a letter of mine published in the “British Medical Journal,” regarding the abuse of cocaine and opium, in which I pointed out that as a matter of fact the abuse of these drugs was very much rarer than the abuse of alcohol and tobacco, allow me to say that it is no exaggerated statement whatsoever, as any unbiased person who cares to take the trouble to find out for himself can easily prove the truth of that fact: that for one cocaine or opium taker there are at least one thousand people who indulge in smoking tobacco. In fact, it must be perfectly clear that my estimate is lower than it ought to be, instead of “exaggerated,” as “Xrayser II.” seems to think. Now, with the pernicious habit of indulging in increasing quantities the effects of this drug, tobacco, as with similar drugs, as opium and cocaine, has two phases: the first the soothing effect, and the restless, irritating, and depressing condition which follows the first phase at longer or shorter intervals; and only those who keep habitually under its influence can realise the dread and discomfort, and therefore they repeat the dose to get back to the first phase again. This is the cause of the craving which is common to all these classes of drugs. The chief cause that there are so many unfortunates given to excessive smoking is because it has become so fashionable of late. Even little boys and girls before they are grown up are apparently proud of being able to smoke, to the detriment of their physical health in every way, owing to its pathological action on the whole system. Every physician must deal with these unfortunate cases every day, and there is no need to “exaggerate,” as the facts speak for themselves only too plainly.

Yours faithfully,

Dublin.

W. F. FURLONG, M.D.

### The Struggle for Existence

SIR,—Most, if not all, of your readers who digested “Jay Mack’s” letter (*C. & D.*, June 24, p. 207) will readily admit that “Jay Mack” has fairly “touched the spot”; and one may wonder how he managed to spare the time to give such a detailed and accurate description of the origin and causes of the present unemployment. Employees would do well to remember that with the fall in the cost of living a lesser salary than heretofore suffices; say, 25 per cent. above pre-war rate should be acceptable; or they might even agree to less, provided their employers allowed a commission on either dispensing, or sales other than “patents.” Important drug-stores and pharmacies are well aware of the necessity of allowing commission to assistants in order to stimulate sales, and of the decline in output which invariably follows the discontinuance of commission on any article. “Jay Mack’s” cause No. 5 would soon be eliminated if salesmanship were rewarded with a fair commission. The multiple-shop companies, who have for the past year or two been steadily weeding out their senior men and replacing them with newly-qualified and less-experienced assistants, would probably have recognised the wisdom of retaining the elder men who served them efficiently during the war had the companies adopted the commission plan with a reduction in wages. The proverbial “too-old-at-forty” cry has been revived, and senior men like myself who became unemployed through the sale of a business or any other cause may anticipate idleness for many months. Generally speaking, women in pharmacy are not so satisfactory as men, but of this their employers and the public whom they serve must judge. Concerning emigration, though we cannot obtain positions while at home, it may be some encouragement to intending emigrants to know that in the Colonies home-trained men are eagerly sought after, and the probability of securing a berth is much greater than in Great Britain at the present time.

Yours faithfully,

McCAWBER (7/7).

Masaid (8/7), in the course of a reply to “Jay Mack,” writes:—Friend Mack has always advised the aspirant to keep before him ownership as the point to make for, but where? is the question. Every town and village that will possibly keep a pharmacist has got one, and it is only as a successor to the present occupants that the young man can reach his goal. To those who would make much of the “pioneer’s reward,” may I say that we are all pioneers, and all of us are at the same time the reapers of what the pre-pioneer has sown for us. We are as ever heirs of the ages, profeters by the one who went before, and such is the teaching of evolution and the materialist conception of history. Emigration, indeed, and to where? To compete across the sea with primitive people in the raw labour market, after our best years have gone. . . . “The young men, the young men, they clamour at the gate.” Will you hear it, elder brethren, or will you sit in stolid satisfaction and deny us the birthright our youth demands?

### Sale of Carbolic Acid

SIR,—With reference to your Scottish correspondent’s note (*C. & D.*, July 8, p. 40), about the sale of carbolic acid in the street, I am wondering whether he saw the same men who visited our suburb lately. I was told a few days ago that two men were going through a road close by, pushing a barrow with two large drums of crude carbolic, and calling out: “Strong carbolic for drains, threepence half a pint,” and serving it into householders’ bottles or jugs. On hearing this I went round to see them, but by that time they had moved on, and I could not trace them, so was unable to do anything in the matter. It is an unfortunate fact that the public have grown so tired of regulations that even in the case of those measures which are designed to protect them they are more likely to shield the person who infringes the law than to bring him to book, especially with such a thing as the sale of carbolic acid, where they would not realise the danger. This attitude is also encouraged by the way in which the public can obtain disinfectants free at the various town halls and municipal centres.

Yours faithfully,

E. STERNITE (8/7).



### Dispensing Delays

SIR,—The incident referred to by "Xrayser II.," where a patient was asked to wait two days for a prescription ultimately dispensed in two hours (*C. & D.*, July 8, p. 53), prompts me to draw attention to an unhealthy practice which has grown up as one of the post-war deficiencies. It has always been an admitted and useful custom for neighbouring pharmacists to oblige each other with the loan of proprietary articles, sundries, etc., that are temporarily out of stock, but when it comes to borrowing galenical preparations which can be quite well prepared, and, in fact, when I was apprenticed were invariably prepared as a matter of course in the pharmacy, it shows either a lamentable lack of pride of craftsmanship or else a deplorable laziness. I have recently had requisitions for such things as pulv. jalapæ. co., pulv. tragac. co., liq. hyd. perchlor., but the last straw was added when I had a note from a neighbour to oblige with half-a-dozen tannic acid suppositories. I am afraid I waxed sarcastic at this, and replied that I was in the habit of making them as required, but if he liked to give me the necessary time I would make him some. If this attitude is due to laziness, then it is, of course, fatal to business, and will bring its own results; it surely cannot be due to incapability; if so, how was the qualifying examination negotiated? From the point of view that it does not pay to perform such transactions, well, as pharmacists, we give a good many services in the course of a day's work, which do not pay us direct profits. Removing grit from eyes, bandaging small cuts, loading plates or films into cameras, and so on, are all items which do not show much profit for labour at the moment, but in the aggregate they bring a good many satisfied customers to one's pharmacy, who feel that they can rely on getting the goods and service they require, and as such the cost should be treated as an advertising expense. One of my best prescription customers is a man who had on one occasion been to several shops with a prescription which he wanted promptly and had been asked to wait a day or so, and, although my pharmacy was out of his way, he came as a last resort, and I offered to make it for him during the afternoon. It was, no doubt, a loss at the moment, but it has been a nice gain ever since, without counting the fact that he invariably sends people to me if he has the opportunity.

Yours truly,

FACIO (10/7).

### Perfume Fountains

SIR,—Having seen various inquiries recently respecting perfume fountains, I may say that some years ago I had one in the shop which was rather an attraction. A large jar of perfumed water placed on the highest shelf was the container or reservoir, and a length of indiarubber tubing conveyed the water to a suitable jet enclosed in a glass jar on the counter—waste pipe inserted syphoned off the water to a clean pail on the floor. As a fact, however, there was little or no waste, but, of course, the affair required some attention. The fountain was useful as an advertisement in the matter of perfumes, and during certain periods of late years when influenza has been raging would have proved more than merely ornamental. There is a portion of the fittings of a burner of the Welsbach type that answers capitally for the jet itself, viz., the brass fitting with five small holes through which the gas passes to the mantle. This fitted to a short tube with stop-cock answers very well, and as the water is occasionally strained gives little trouble, though it takes very little dust to choke one or other of the small holes. Anyway it is worth the trouble, and only requires the occasional use of a pin. Theoretically, the height of the spray is equal to the height of container, but in a small way this is not so, and the length of piping has something to do with it, absence of pressure, etc. However that may be, three or four feet will generally suffice and be easily reached.

Yours truly,

AERISER (8/7).

### Legal Queries

*C. F.* (7/7) and *H. R.* (6/7).—REGISTERING TRADE-MARKS.—See *The Chemist and Druggist Diary*, 1922, p. 277.

*J. H. S.* (4/7).—The ointment recommended on a hand-bill for several ailments must bear a medicine stamp and the maker and vendors must hold patent medicine licences.

*H. S. & Co.* (4/7).—The words "Strengthens the Nervous System" on a label do not in themselves constitute a recommendation of a preparation for the cure of an ailment and would not render the article liable to medicine stamp duty.

*S. & Co.* (8/7).—The mention on the blood capsules label that they are good for "anæmic persons" would, we think, involve liability to medicine-stamp duty. Anæmia is a distinct disease, and anæmic persons are presumably those who suffer from it.

*J. D. W.* (26/6).—Full particulars of the conditions necessary for registering trade-marks are given in *The Chemist & Druggist Diary*, 1922, p. 277. If there are any points in the article which are not quite clear we shall be glad to give further particulars.

*A. J.* (1/5).—We advise that the lemonade-powder envelope should contain an indication that the powder is made with tartaric acid, although, as we have stated, lemonade powder has always, so far as we can trace, been compounded with tartaric acid.

*S. W.* (30/6).—In our opinion the proposed display of words on the sign of a pharmacy carried on by an unqualified person would constitute an infringement of the Pharmacy Act, 1868. The Act would be interpreted by the judge in a common-sense way, and he would not, we think, encourage ingenious attempts to infringe the law.

*H. J. S.* (4/7) asks whether a girl under the age of 18, whom he employs in his business, requires an unemployment card. [If the girl is 16 years of age, she must be insured against unemployment; but until she is 18 the weekly contribution payable in respect of her will be 8½d. only, of which 4d. may be deducted from her wages.]

*J. M.* (10/7).—It is necessary that you should carry out strictly the requirements of the Pharmacy Act in regard to copying National Insurance Act prescriptions in the prescription-book. The issue of duplicate prescriptions was intended to simplify the work of the chemist in this respect, but the recent abolition of the extra copy has had the effect of much increasing the time required for dispensing Insurance scripts.

*SCOT* (4/6).—An unqualified person who is a partner of a registered chemist must be careful not to use the title chemist and druggist. It should be remembered also that "the business of a chemist and druggist" referred to in the Poisons and Pharmacy Act, 1908, has not been the subject of a legal decision, but it is possible that an unqualified person is precluded from carrying on the business except under the conditions laid down in the Act.

*B. & Co.* (6/7).—There is no bar dealing with the use of industrial spirit in the manufacture of hair washes. The spirit would not be suitable for use in perfumes owing to the presence of naphtha. We have from time to time given hints on the kind of denaturants for hair washes which would be accepted as suitable by the Board of Customs and Excise. For example, the addition of extract of quassia loz. and saponin 2dr. to five gallons of a hair lotion was accepted, but every case has to be especially sanctioned.

*E. S. B.* (3/7), who is a works chemist in the service of a limited company, has just received notice from the income-tax authorities of his district that he is in future to be assessed under Schedule "E" on the actual salary, fees and other emoluments received by him in the year of assessment instead of on the average of his earnings in the three preceding years, and calling upon him to make a return accordingly. He asks if this is right, and whether he has any means of appeal. He also asks how



he can claim repayment of income-tax on interest of a mortgage held for a trust of which he is an executor. The Finance Bill now before Parliament lays down that income-tax on any office or employment (except where the income is derived from a foreign possession) is to be assessed in future under Schedule "E," instead of Schedule "D," and no doubt the Bill will become law. The tax is to be charged on the actual income received in the year of assessment, and the Bill provides that if anyone shows at the close of the year that the amount for which he was assessed exceeded the amount of income he actually received, repayment is to be made to him of the amount overpaid. "E. S. B." can claim repayment as trustee on behalf of the trust of the income-tax paid on the mortgage interest, just as in the case of a private individual not liable to the tax. He ought to obtain from the local inspector a repayment claim form and send it in, together with the certificates that the tax had been deducted before the interest was paid over to him as trustee.]

## Miscellaneous Inquiries

When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

**Yerac (14/6).—REMOVAL OF TATTOO-MARKS.**—We have several times dealt with this subject, but your inquiry gives us an opportunity of reproducing recent remarks in "The Lancet." That journal, dealing with a report by an Italian surgeon named Cattani, states that the methods which Cattani finds the most successful are Variot's galvano-cauterisation under local anaesthesia, "harpooning," or digging out each granule of pigment (Wederhake's method), and excision of the skin. Variot's procedure begins with a preliminary cleansing of the skin, on which a concentrated aqueous solution of tannin is applied. With the tattoo needle the pigmented area is now freely punctured, and into the punctures thus made silver nitrate is repeatedly rubbed, and the skin is then strewed with powdered tannin. A protective dressing is applied, and after a short time a violent inflammatory reaction follows, with swelling and necrosis of the skin. After two to four weeks the crust thus formed is discharged, and the underlying structures, which are at first red, pale gradually in a few months. A slightly raised scar is left to indicate the original site of the tattooing. Cattani has never seen permanent ill-effects follow this method, which, he admits, is painful as well as requiring much time and patience. He refers to a case recorded by Parent-Duchatelet in 1857, where the removal of tattoo marks by caustics terminated in death.

**Westgate (16/6).—PLANT FOR IDENTIFICATION.**—The plant arrived in bad condition, the leaves almost rotten; the fruit not ripe, and in a very bad state for identification. It is a mistake to use wet cotton wool when sending fresh plants. To arrive in good condition they should be wrapped in waxed paper with a small piece of damp (not wet) blotting paper enclosed. This is quite sufficient to prevent evaporation from the leaves. The plant, however, may be reasonably identified as *Crepis setosa*, N.O. *Compositae*. It is distinguished by having the involucrel phyllaries and the pedicels covered with blackish, stiff short hairs (setae) and by having the achenes furnished with a beak of nearly equal length. The inner surface of the phyllaries is not downy and the outer phyllaries at the base of the involucre are spreading. The plant otherwise comes near to *Crepis biennis*, in which the inner phyllaries are downy within, the achenes taper, but are not distinctly beaked, and the setae are not present. *C. biennis* is a native species. *C. setosa* is, as suggested, a naturalised alien introduced with seed and now widely spread throughout the country, emphasising the necessity for seed-testing stations under the Department of Agriculture. The plants of the genus are known as hawk's beards, but, of course, an alien has no English name.

**T. B. (17/5).—PLATE-POWDER.**—The sample you send consists of a pale buff powder, quite odourless, containing only 0.3 per cent. of moisture, and yielding 99.2 per cent. of ash on ignition. By microscopic examination as well as by chemical tests it appears to consist entirely of Tripoli powder.

**Clayton (31/5).—RASPBERRY CONSERVE.**—The sample you send appears to contain no fruit or fruit juice. It seems to be entirely artificial. The microscope reveals the presence of diatoms characteristic of agar (or Japanese isinglass), which is the jelly-forming constituent. Glucose is probably present in considerable proportion, but the identification of sugars in such mixtures involves a lengthy analysis. The essence is partly, if not entirely, artificial.

**P. H. G. (29/5).—PIG-POWDERS.**—We have examined the two samples you send us, with the following result: (a) This sample is a dark grey powder and appears to consist of potassium nitrate with a little vegetable charcoal, about six parts of the former to one of the latter; there does not appear to be any other ingredient. (b) This sample is a fairly heavy dark iron-red powder with a few glistening crystalline particles. The chief constituents appear to be potassium nitrate with smaller quantities of sulphur and an antimony compound, probably the native sulphide. The brown colour does not seem to be due to an essential ingredient. A little iron is present, and some sulphate. The odour of fennel appears to be due to a little of the oil, as no vegetable powder is evident.

**J. W. C. (29/5).—INDIGESTION MIXTURE.**—The sample you send contains bismuth and nux vomica, and appears to be similar to the liquor bismuthi co. c. pepsin in "Pharmaceutical Formulas" (p. 670). The presence of pepsin, however, was not proved with the small sample sent.

**W. W. (18/6).—WATERPROOFING CLOTH.**—See *C. & D.*, June 3. p. 72.

**V. L. F. (30/6).—COCAINE EYE-DROPS FOR FACTORIES.**—See *The Chemist and Druggist Diary*, 1922, p. 234.

**E. W. (3/7).**—We cannot trace a registered formula for a "known, admitted and approved" remedy bearing the number you give.

**Desiccated (23/6).**—We are unable to supply you with formulas for desiccated soup tablets.

**Trigeminus (26/6).—CALORIFIC FLUID.**—Ethyl chloride is generally used now as a calorific fluid in tooth extraction. The older form of fluid is given in "Pharmaceutical Formulas," the following being a representative recipe:

Æther. pur.	...	...	3vj.
Menthol.	...	...	3ss.
Ext. cannab. ind.	...	...	9iv.
Ol. menth. pip.	...	...	5j.
Misce.			

**W. A. S. (6/6).—CASTRATOR'S GREEN OINTMENT.**—The following is from "Veterinary Counter Practice":

Cupri acet.	...	...	3ij.
Terebinth. Venet.	...	...	3ij.
Adipis	...	...	3x.
Et. ung.			

## Retrospect of Fifty Years Ago

Reprinted from "The Chemist and Druggist," July 15, 1872

### Life of Faraday

Quoted in a review of Dr. J. H. Gladstone's "Life of Faraday": "Inventors and promoters of useful inventions frequently benefited by the advice of Faraday, or by his generous help. A remarkable instance of this was told me by Cyrus Field. Near the commencement of his great enterprise, when he wished to unite the old and the new worlds by the telegraphic cable, he sought the advice of the great electrician, and Faraday told him that he doubted the possibility of getting a message across the Atlantic. Mr. Field saw that this fatal objection must be settled at once, and begged Faraday to make the necessary experiments, offering to pay him properly for his services. The philosopher, however, declined all remuneration, but worked away at the question, and presently reported to Mr. Field: 'It can be done, but you will not get an instantaneous message.' 'How long will it take?' was the next inquiry. 'Oh, perhaps a second,' 'Well, that's quick enough for me,' was the conclusion of the American; and the enterprise was proceeded with."



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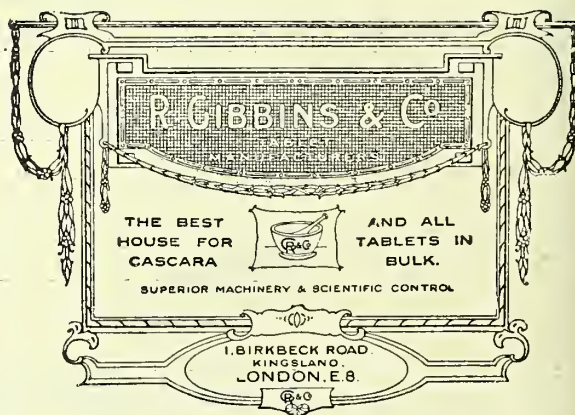
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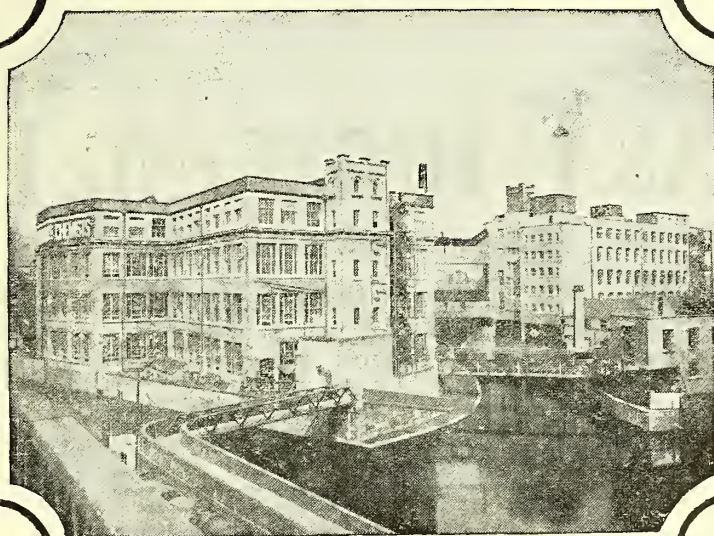
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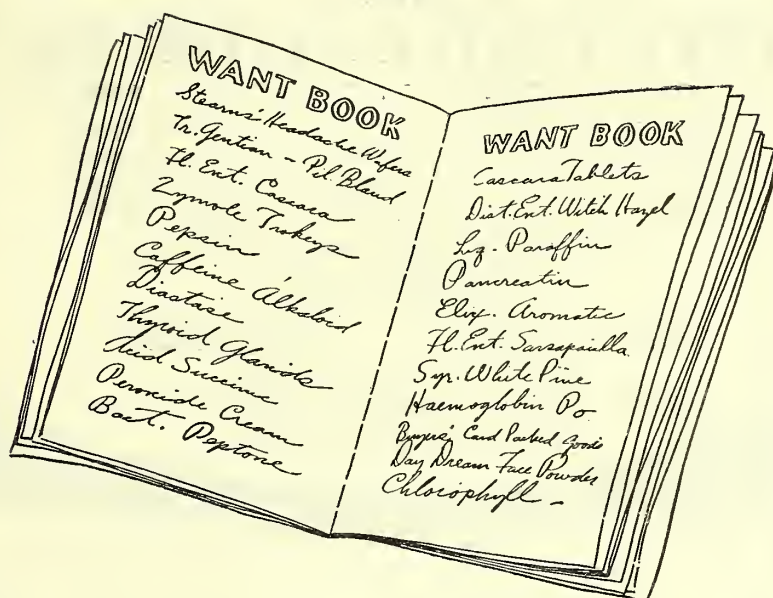
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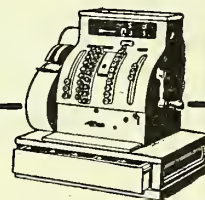
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IT WILL INTEREST YOU AND IT WILL INTEREST YOUR CUSTOMERS.

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On and after July 1st, 1922, all orders amounting to gross value (£16 4s.) will be sent out in **FREE CASES**; this will be a great advantage to our Customers who order direct, saving Carriage on returned empties, besides supplying Cases Free of Cost. Carriage paid upon orders amounting to £100.

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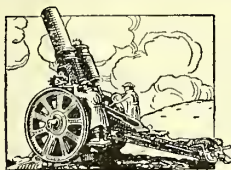
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**15/-** „ **135/-** „ „

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30/- per gross	50/- per gross	$7\frac{1}{2}$ d. size
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**BONUS AS USUAL.**—  
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**SPECIAL NOTE.**—The only alteration in retail price is the present 9d. size, which will sell at 7½d. after June 1st. The 9d. Price will be supplied until that date at the reduced rate (in order to clear big Contracts of printed boxes), after which we shall supply smaller sizes to all customers requiring the new price.

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1/3 Size, now 7/9 dozen.      2/3 Size, 14/- dozen.

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goes one better than ordinary ammonia in quality—and profit. Recommend it and reap that benefit.

We do not put the label on until the quality is there.

All experienced buyers know that the name of Sutton stands for trustworthiness, uniform high quality, and absolute purity.

Please send for terms :

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Osborne Works, Brandon Road,  
KING'S CROSS, LONDON, N. 7



## CACHETS "FINOT"

(White or Coloured)

With inscriptions in any desired tint; also Plain or Embossed.

"A distinction all their own."—C. & D.  
"Perfection of Cachets."—Lancet.

These Cachets are especially adapted for Headache, Neuralgia and other powders.

COOPER, SON & CO. LTD., 80 Gloucester Road, SOUTH KENSINGTON.  
In 17 Sizes to fit the various types of Cachet Machines.

ALL CHEMISTS  
SHOULD STOCK

## ABDINE

THE GOLD MEDAL FRUIT DRINK.

Quick Seller. Big Profits. Over 40 years' Reputation.

"Abdine" is the most popular Health Drink, superior to all Mineral Waters. The Original and only genuine Fruit Drink.

Reduced Price List can be had on application.  
DUNCAN MCGILSHAN, LTD., ABDINE WORKS, WESTFIELD ROAD, EDINBURGH.

## NURSE HARVEY'S MIXTURE

A safe, simple, and reliable remedy for Children's Ailments is advertised so extensively in the daily and weekly Press as to bring mothers to the retailer without effort on his part.

The selling has been done before the mother reaches the chemist, and, having supplied her, it is only common sense to claim she will buy other family necessities from him. Moreover, the retailer has a profitable return on a quick turnover.

For Direct Terms apply to—

OSCAR SCRUTON & CO., YORK.

# KUTNOW'S POWDER WILL MAKE YOUR PROFITS

Kutnow's Powder is acknowledged by chemists and medical men to be the best product of its kind on the market.

That is why no customer who has once tried it ever leaves it for long.

The margin of profit is remarkably liberal. We are educating the public to take Kutnow's Powder by means of a consistent widespread advertising campaign which is already bringing remarkably good results. Our sales are mounting. So will yours. You have only to show the Public you stock Kutnow's Powder by arranging an attractive window display and you get their custom and our bonus.

*Write for  
details of  
special  
window display  
bonus scheme  
and terms.*

**S. KUTNOW & CO., Ltd., 41 Farringdon Rd., E.C.1.**

**PYORRHEA.**—One of the most prolific sources of the ills to which flesh is heir to, its ravages have become a matter of first-class medical importance.

## "SANOGYL"

### PREVENTS AND CURES PYORRHEA

A dentifrice prepared on the scientific basis reported to the Medical Conference at Rouen in August 1921, by Dr. B. Kritchevsky, Joint Professor of the French School of Stomatologie, Paris, and Dr. B. Seguin of the Pasteur Institut of Paris.

It is strongly recommended for rapidly combating Pyorrhea alveolaris, Mercurial Stomatitis, Gingivitis, Scurvy, and successfully preventing and curing mouth infections.

Most convincing results have been obtained by the Dental Profession of Great Britain, France and America.

"Dr. Kritchevsky is to be congratulated upon his services, not only to the Dental Profession, but to the public at large, and there can be no doubt that his preparations may be conscientiously recommended."

*The Dental Surgeon, Feb. 18, 1922.*

*Sole Representatives for the British Empire:*

**SEALAND TRADING, Ltd.**

Buchanan Buildings, 24 Holborn, LONDON, E.C.1

Sold by all Chemists and Druggists 2/6 per tube.

**P. A. T. A.**

### NOTICE

is hereby given that the  
**ANNUAL MEETING**

of the

**PROPRIETARY ARTICLES  
TRADE ASSOCIATION**

will be held at the  
**HOLBORN RESTAURANT, W.C.**

on

**THURSDAY, JULY 20, 1922,**

at 3 p.m.

*All members are invited to attend.*

**WILLIAM S. GLYN-JONES,**  
Secretary.



# A TOP HOLE SELLER



PER **6d.** TIN Registered.

Place your orders now for the coming winter and be  
 :: FIRST IN YOUR DISTRICT ::  
**NO CUTTING ALLOWED.** Orders only accepted  
 on these terms. In quantities of 1 gross upwards 45/- carr.  
 pd. 6 doz. and under 48/- gross. Cash with order.  
 Novel window display material.

MAY BE OBTAINED FROM WHOLESALE HOUSES OR DIRECT FROM—

**BEWELLS' Ltd.,** MANUFACTURING CHEMISTS, **19-21 Pitfield St., N.1**

## DEVONSHIRE JUNKET

There are **NO FAILURES** with  
**Jackson's Essence of Rennet**

OR

**Jackson's Rennet Tablets**

A child can use either to make  
 a firm, rich Junket every time

ESSENCE.	ATTRACTIVE SHOWCARDS	TABLETS.
3 oz. 6/6 doz.		6/- doz.
6 „ 11/- „	With each Line.	Tubes of 16.

**ERNEST JACKSON & CO., Ltd.,**  
 MANUFACTURING CHEMISTS,  
**CREDITON, DEVON.**

London Depot: Plantain Place, Crosby Row, Boro', S.E. 1.

## HARROGATE TABLET COMPANY'S HELPFUL TALKS to CHEMISTS.

I. Dr. Stork's Worm Cakes (*See July 1st*)

## II HARROGATE HEALTH GRANULES.

Every Chemist likes to think that the lines he sells to his customers are the best on the market. Our Health Salts are also unique; they have that extra little touch which is so difficult to define, but which adds distinction. As Harrogate is famous for its Sulphur Water and Baths treatments, you will find your customers will be attracted by Sulphurtown Health Granules.

Packed in air-tight lever lid tins, lined with greaseproof paper.

Price 7/- per dozen. 80/- per gross.

**HARROGATE TABLET CO., Ltd.**  
 CHATSWORTH GROVE,  
 HARROGATE.



**Guaranteed Relief**  
— or **MONEY BACK** ★



**For Rheumatism, Lumbago, Neuritis,  
Gout, Sciatica, and all other Uric Acid  
Complaints.**

A Nationally Advertised Line that pays  
Retailers 25% on a steady increasing  
sale. Send now for Special First Stock  
Parcel: 1 doz. 3/- size, 1 doz. 5/- size,  
½ doz. 12/- size. Any quantity Carriage  
Paid. Window Display Terms on  
Application. All Wholesalers stock  
**PHYSIKURATE.**

On P.A.T.A. List

As advertised, any dissatisfied customer will receive  
money back on applying direct—this saves you from  
trouble and ensures your recommendation and profit.

★ **PHYSIKURATE, Ltd., 92a Upper Clapton Road,  
LONDON, E.5.**

“ **WORKS WHILE YOU SLEEP** ”

## Announcing **Ki-Uma** the new cure for Rheumatism

A new profit-builder for chemists. Ki-Uma  
is profitable to handle not only because of  
the generous margin of profit that is offered  
to you, but because of the demand that we  
are building.

Ki-Uma is revolutionizing the treatment of  
Rheumatic disorders—curing cases that had  
formerly been discharged as hopeless. Our  
advertising will tell the story to your public.

The price is 29/- per dozen with a bonus  
of 2/6 for window display. Communicate  
direct with

**Ki-Uma Ltd., Bath, England.**

# Ki-uma



*Chemists'  
attractive counter  
display.*

*Free from pain  
quite young again*

## POISONS and PHARMACY ACT.

Privy Council Order, Jan. 1, 1921.

## DANGEROUS DRUGS ACT, 1920.

Regulations of May 20, 1921. (Operative Sept. 1, 1921.)

# Dr. J. Collis Browne's CHLORODYNE

is not affected by above Order or Regulations.

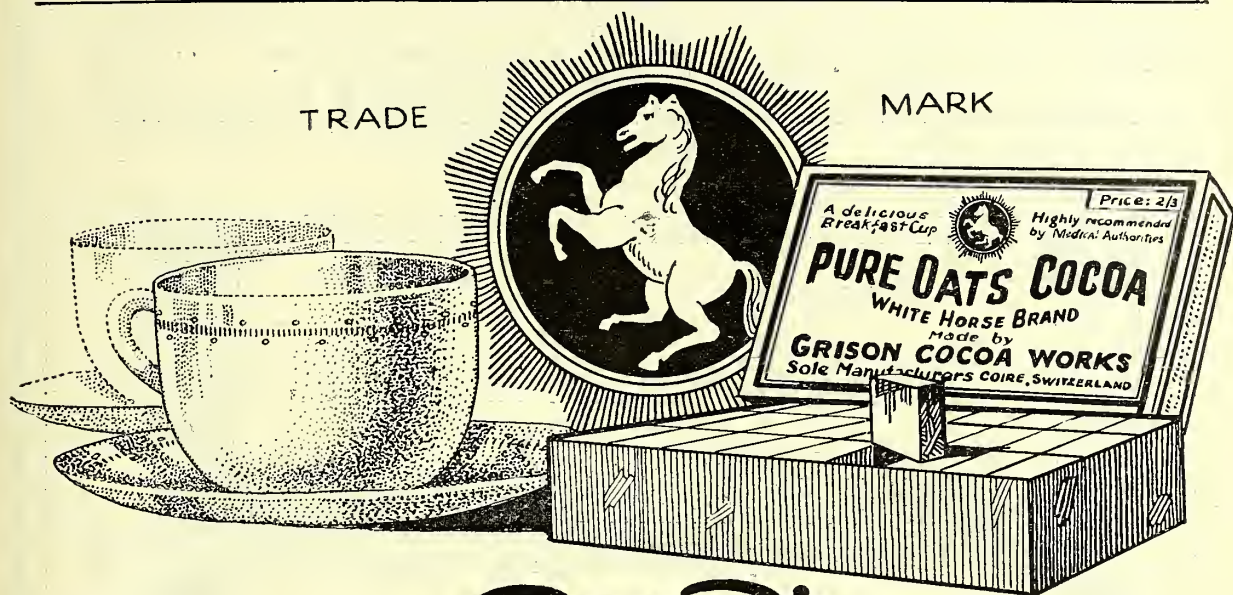
**It does not require purchaser's signature.**

**Proprietors: J. T. DAVENPORT, Ltd., 117 Union Street, S.E.1.**



TRADE

MARK



# GRISON'S PURE OATS COCOA

For generations Grison's Pure Oats Cocoa has been the wholesome means of sustaining and nourishing those who lose their grip on glowing health. Over a period of 30 years Grison's Oats Cocoa has been well known and appreciated abroad.

Grison's Pure Oats Cocoa is an admirable food for strengthening weak digestions and building up bone and muscle. For nursing mothers, invalids and the aged it has no rival. Medical practitioners in every country in the world recommend it.

Grison's Pure Oats Cocoa is old-fashioned simple fare—Nature's gift of the finest oats and cocoa truly mixed and blended with indispensable body-building salts.

Liberal free samples, with trade terms, sent to Chemists and Druggists on request.

*This preparation is on the P.A.T.A. list and shows a good and uniform profit to all who handle it.*

**GRISON'S PURE OATS COCOA CO., LTD.,**  
72 REGENT ST., PICCADILLY CIRCUS,  
LONDON, W. 1

# The SURGICAL HOSIERY Co. Ltd.

(Department B),

RUSSELL STREET, NOTTINGHAM.

Manufacturers and Patentees of

## SURCO SEAMLESS HOSIERY

In Light qualities for Summer wear, or Stout for hard wear.



Old Style  
With Seams



"Surco"  
Patent Seamless

*Price List and Measurement Forms on Application.*

Articles made to measure dispatched in 24 hours.

### THE "PORTIA" ADJUSTABLE BABY'S BALANCE

Also  
complete  
with  
Netted  
String  
Hammock.

☐  
Write  
for  
Prices.  
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Always  
Accurate.

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The  
BEST  
and the  
Handiest  
Portable  
Baby's  
Balance.  
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Obtainable from all Wholesalers.

**SOLPORT BROTHERS, Ltd.**  
184/190 Goswell Road, LONDON, E.C. 1.

## CURASOL

THE ORIGINAL

### Boracic Socks

Fixed Selling Price, 6d. per pair.

Cost, 4/- per dozen.

Six dozen lots, 46/- per gross.

*Distributing Agents :*

England and Wales—

Sangers, 42a Hampstead Rd., London, N.W. 1.

Scotland—

Munro, M'Laren & Sutherland,  
17 Cadogan Street, Glasgow.

For Sample Pair (state size) send Postcard to—

**The Curasol Sock Co.**

19/20 Garlick Hill - - LONDON, E.C.4.



# THE "MATER" CLINICAL

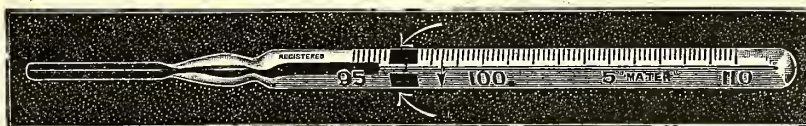
MAGNIFYING FRONT. NATIONAL PHYSICAL LABORATORY GUARANTEE.  
EASY TO READ. EASY TO SHAKE DOWN.

This series is the only **Clinical** Thermometer on the

**P. A. T. A. LIST**

**AN ADEQUATE MARGIN OF PROFIT BEING GUARANTEED**

REGISTERED No. 553038



PRICES OF THE "MATER" CLINICAL IN METAL CASES:—

**Retail** ... 2 min., 4/6; 1 min., 5/6; ½ min., 7/- each.

**Wholesale** „ 27/-; „ 33/-; „ 42/- per doz.

**PERKEN, SON & CO., Ltd.,** 94 HATTON GARDEN,  
LONDON, E.C. 1.

Established 1852.

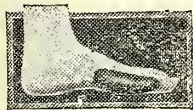
Telephone : 724 Holborn.

Contractors to H.M. Government.

Telegrams : "Optimus, Smith, London."

## DR. SCHOLL'S BUNION REDUCER

Relieves and reduces bunions and enlarged joints. Eliminates shoe pressure. Made of finest surgical rubber. Men's and Women's Sizes: Rights and Lefts. Price 2/6 each.



**Dr. Scholl's**  
*Foot Comfort Appliances*

are nationally advertised in all the leading newspapers and periodicals. Link up with this big publicity by featuring "Scholl" goods strongly in your window-dressings.

Write to-day for Illustrated Catalogue.

The SCHOLL MFG. CO., Ltd., 1.4 GILTSFUR STREET, E.C.1.

## SURGICAL APPLIANCES

Of All Kinds.

We are actual makers of various Health Appliances, including the "Prorace," and others referred to in Dr. Marie Stopes' book, "Wise Parenthood," etc. Terms on application.

**LAMBERT, SON & WATKINS**

*Druggists' Sundriesmen,*

60, 62 & 64 Queen's Road, Dalston,  
LONDON, E. 8.

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*Wholesale & Export  
Enquiries Invited*

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Our New 1922 Price List  
is now ready for distribution

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**EDWARD TAYLOR, Ltd.**

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Telegrams :  
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TRADE

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Telegrams :  
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Cables :  
Code, A B C 5th Edition.

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CLERKENWELL 1347  
" 1348  
" 1349  
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SURGICAL DRESSINGS AND CHEMISTS' SUNDRIES

**ARTHUR BERTON LTD.**

**SPECIAL LINES**

IN

**VACUUM FLASKS**

DELIVERY FROM STOCK

WRITE TO-DAY FOR

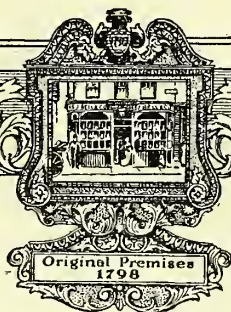
**QUOTATIONS AND SAMPLES**

SHOWROOMS :

15 & 17 Worship St., LONDON, E.C. 2. 84 Miller St., GLASGOW

And MANCHESTER.





# The "MARYLEBONE"

## STERILIZED

# ACCOUCHEMENT OUTFITS.

These Outfits contain sufficient dressings, etc., for the accouchement.

THE "MARYLEBONE" OUTFITS are always "GOOD STOCK" as the contents cannot deteriorate or become soiled, and sterility is maintained.

### Retail Prices :

No. 1 Outfit

**31/6**

No. 2 Outfit

**63/-**

*Trade Terms and descriptive literature on application.*

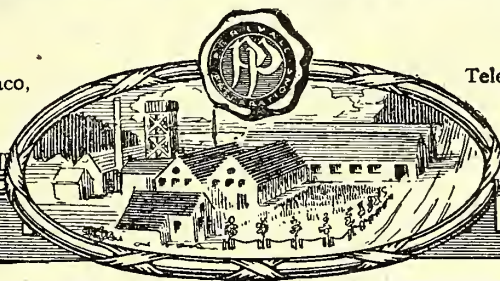
IT WILL PAY the Pharmacist to hold stocks of these outfits. A large demand is being created by means of an intensive Press campaign.

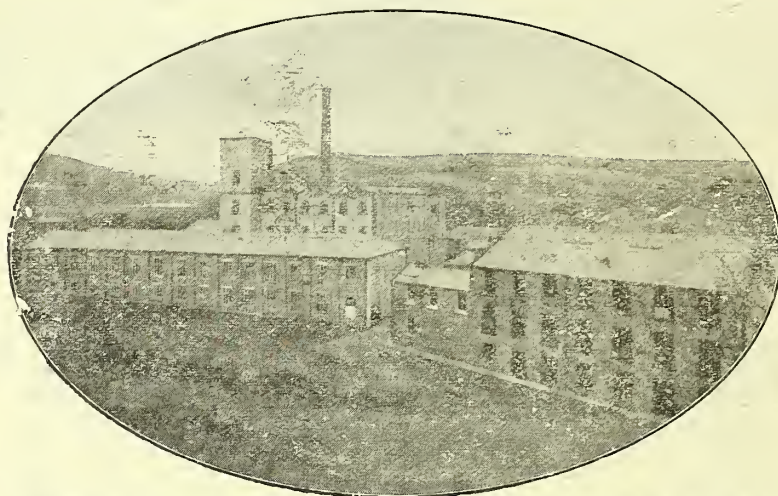
## JOHN BELL & CROYDEN, Ltd.

**50 Wigmore Street, LONDON, W. 1.**

Telegrams : "Croybelaco,  
Wesdo, London."

Telephone : Mayfair 5015  
(4 lines.)



*Reg. Trade Mark.*Insist on having  
"Wardella" Brand.*Reg. Trade Mark.*Insist on having  
"Wardella" Brand.

# WARDELLA SURGICAL DRESSINGS

## of SUPER QUALITY

WHOLESALE AND EXPORT ONLY

Absorbent Lint, Boric Lint, Bandages, Gauzes, Gauze Tissue,  
Cotton Wools, Coiled Wool, Grey Wools, Capsicum Tissue,  
Sanitary Towels, Dental Gauzes and Napkins, Hygienic Squares.

BLEACHERS OF BANDAGE CLOTHS, GAUZES, etc.,  
TO THE TRADE. Also ABSORBENT COTTON.



### THE WARDLE COTTON Co., Ltd., WARDLE, near ROCHDALE.

*Spinners and Manufacturers from the raw material to the finished product.*

LONDON: 9, FORE STREET AVENUE, E.C.2

SOLE AGENTS for all parts of ASIA, AFRICA, CENTRAL AND SOUTH AMERICA,  
AYRTON, SAUNDERS & CO., LTD., LIVERPOOL,  
to whom enquiries and orders for "Wardella" Brand goods should be addressed.



# THE CHEMIST AND DRUGGIST SUPPLEMENT

42 CANNON ST.  
LONDON E.C. 4

JULY 15, 1922

*This Supplement is inserted in every copy of The Chemist & Druggist.*

## THE SUPPLY OF SUPPLEMENTS.

The clerical work in connection with the posting of spare copies of the Coloured Supplement week by week has increased to such an extent that we have been compelled to reorganise our system of distribution. Our readers will please note, therefore, that, in future, instructions can be accepted for not more than six successive issues of the Supplement at a time, and that in every case

*Addressed Wrappers Stamped One Penny*

must be sent. Loose stamps will not be accepted.

**EARLIER CLOSING FOR PRESS.** Will advertisers please note that until further notice it will be necessary that Advertisements intended for the Supplement must reach us not later than the **FIRST POST THURSDAY MORNING.**

## CHEMISTS' TRANSFERS.

**Messrs. ORRIDGE & CO., 56 Ludgate Hill, E.C.**

Telephone No : City 2283.

May be consulted at their Offices on matters of SALE, PURCHASE and VALUATION.

1.—LONDON, W. (Residential).—Family Retail and Dispensing Business; very old-established; returns, present rate, about £1,500 per ann.; gross profit 40 per cent; single-fronted shop, well-fitted and stocked; house sub-let to show profit rental of £31 per annum; held on lease; price £950, or near offer entertained.

2.—SOUTH LONDON.—General Cash Retail Business, showing a net profit £1,000 per annum; single-fronted shop, good working stock; further details on application.

3.—MAYFAIR.—Old-established Business, Retail and Dispensing, with net profit about £450 per annum; lease 30 years; net rental £40 per annum; terms, valuation of stock and fixtures from £500 to £600 and premium for lease.

4.—LONDON, W. (near) (Death Vacancy).—Must be sold, Retail and Dispensing Business; modern, well-fitted shop, fully stocked; large residence; new lease of 21 years will be granted; returns exceed £6,000; profits above the average; to effect a speedy transfer, no reasonable offer refused.

5.—CITY.—For immediate disposal, for removal, the residue of Stock and Containers, together with the Fixtures, Fittings, Edge Runners, Driving Motors, etc., of a Wholesale Manufacturing Druggist, the whole of which can be inspected by appointment. No reasonable offer will be refused for part or whole.

6.—CITY.—For Disposal, the Fixtures of a Dispensing Business, comprising nests of mahogany fronted drawers, shelving, mahogany counters, fitted with mahogany cupboards to front and shelving within, desks, till, etc.; offer wanted.

7.—SOUTH COAST.—Cash Retail Business, including postab trade; gross receipts about £12,000 per annum, at full prices; further details on application.

8.—WEYMOUTH (within easy distance of).—Old-established Business, Retail, Dispensing and Optical; returns, last year, exceeded £2,500; net profit between £500 and £600; property must be purchased; part payment entertained.

9.—GLAMORGAN.—Cash Retail Business, with Wines and Spirits; present hands 50 years; returns average £3,634 per annum, at fair prices; large house, private entrance; garden, held on long lease; no opposition; price £2,500.

10.—NORTH OF ENGLAND.—General Retail Business, with good opening for Photographic; established 1837; returns between £60 and £65 weekly; net profit £800 to £900 per annum; modern-fronted shop, well stocked; held on lease; price £1,600.

11.—EASTERN COUNTIES.—Unopposed Country Retail Business, very old-established; returns, present rate, £1,800 per annum, at good prices; good living accommodation in excellent repair, large garden; new lease will be granted, or property may be purchased; price £1,200, or near offer entertained.

12.—MIDLANDS.—Bottle Manufacturing and Perfume Business, at present conducted by a woman; 6 large workrooms; rent £39 per annum; price £550; good opening for energetic man.

13.—SCOTLAND.—Wholesale Business, established upwards of a century; a number of Proprietaries are included, which are stocked by most chemists; returns between £4,000 and £5,000; terms, stock and plant at valuation, and sum for goodwill to be arranged.

14.—NEWMARKET (few miles from).—General Retail Business including well-known Agricultural Proprietary; returns, present rate, £2,500 per annum; net profit £600; double-fronted shop, well fitted and stocked; large house; long lease; further details on application.

## VALUATIONS FOR STOCKTAKING.

Messrs. O. & Co. desire to emphasize the necessity of a periodical Statement of Account by which means alone Profit, the value of Business, &c., can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted and eventually becomes the cause of confusion and loss.

Messrs. O. & Co. are prepared to undertake these essential duties and make Special Terms for such services.

**ORRIDGE & CO., 56 LUDGATE HILL, LONDON, E.C. 4**



# BERDOE & FISH

*Valuers and Transfer Agents,*

35 Jewry Street, Fenchurch Street, E.C.3.

Telephone—1809 CENTRAL.

1. SOUTH COAST.—Cash Drug Stores with Stationery, Tobacco and Confectionery business adjoining; returns over £3,700, increasing; splendid position; freehold must be purchased. Price for the whole, £3,500.

2. SURREY (few miles out).—Good-class Suburban Business, entirely under manager; returns £3,000, and increasing; splendid main road position; convenient house and garden; handsome pharmacy, fully stocked; price £2,150.

3. LONDON, S.W. (High-class district).—Smart, energetic man required as managing partner, able to invest £1,000; good salary and half share in profits offered to right man, which, if properly worked, would come to £750 a year. Further details on receipt of references.

4. LONDON, S.E.—Middle-class light suburban retail, with Kodak's Agency. Returning over £1,800, under manager; good profits. Convenient house attached; low rent, on lease. Fully stocked. Price £1,400, or offer; only cash buyers entertained.

## BUSINESSES WANTED.

Messrs. Berdoe & Fish are anxiously seeking sound concerns on behalf of cash clients from £800 to £3,000.

Intending vendors are cordially invited to correspond.

## STOCKTAKING VALUATIONS.

We are now booking dates for July and August, and invite early applications to save disappointment. Terms sent on application.

ESTABLISHED 1870.

## The Association of Mnfg. Chemists

— LIMITED —

Head Offices—26-28 Kimberley House,  
Holborn Viaduct, London, E.C. 1.

(and at 2 Bixteth Street, Liverpool).

PARKIN S. BOOTH, Accountant and Valuer.

PHONE: CITY 6942-43.

## WE HAVE THE FOLLOWING BUSINESSES FOR DISPOSAL.

1.—LONDON, W.—Retail Chemist and Druggist's Business; large double-fronted shop, well fitted; scope for energetic man; purchase must include freehold premises; three floors above shop, all let off, producing £6 a week; two workshops at rear; price, all at, £3,000; fullest particulars on application.

2.—WOOLWICH.—Drug and Herbal Stores; in busy thoroughfare; premises held on weekly tenancy; lease might be granted; premises consist of shop, parlour, and large room above; scullery and shed at rear; long garden; business established 10 years; under qualified proprietorship business could be greatly improved; good scope for Dentistry, Optics, and N.H.I.; price about £800; fullest particulars on application.

3.—Small Wholesale Manufacturing Chemist Business for disposal, owners of several registered trade-marks.

4.—HOLBORN CIRCUS, E.C. (CLOSE).—Fine modern Manufacturing Premises to be Let, comprising basement, ground and three floors over, floor area about 5,000 sq. ft., divided into excellent offices, showrooms, workshops, storage, etc., fireproof floors, hydraulic lift, central heating, electric light, ample lavatory accommodation; new condition; exceptionally well lighted; immediate possession; low rent; reasonable price for lease of 55 years.

5.—Proprietary Article for Sale; business has good connection among Chemists; full particulars on application.

6.—PORTSMOUTH.—Established over 20 years; Retail Pharmacy; well fitted and stocked premises, held on lease, 6 years to run, with 14 years option; rent, £40; dwelling accommodation; fullest particulars on application.

Stocktaking and Valuations for all purposes undertaken upon Reasonable Terms.

## BAKER & ROBERTS

P. C. Baker, Ph.C., M.P.S. W. Rooke Roberts, M.P.S., F.S.M.C.

174 VICTORIA ST., S.W. 1. Tel.: VICTORIA 27.

*Valuers for Sale or Purchase,  
Income Tax, Probate, etc.*

Personal attention, no publicity,  
please write for moderate terms.

Recommended by The British Drug Houses, Messrs. Meggeson, Ltd., Messrs. Barclay & Sons, Ltd., and many other leading Wholesale Houses.

## ERNEST J. GEORGE

CAN INTRODUCE  
IMMEDIATE AND BONA FIDE  
PURCHASERS

FOR BUSINESSES

£1,000 to £10,000

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*Valuer, Transfer Agent & Stocktaker,*

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*Special Terms for Stocktaking and  
Pricing-out Chemists' Stock Sheets,  
Income Tax and Accountancy work.*

All Valuations have the personal attention of C. C. Marsden.

## BRETT & CO.

All Valuations have the personal attention of F. J. Brett, M.P.S.

*Transfer Agents and Valuers,*

73 LAUREL ROAD, LEICESTER.

Telephone: 1934.

## BUSINESSES WANTED.

We desire particularly to draw the attention of Colonial and Foreign Subscribers to the fact that in cases where they require partners, agents or assistants, or wish to sell their businesses, an Advertisement in this Supplement, placed in every copy of "The Chemist and Druggist," should be the readiest means of helping them to attain their object. The tariff for such announcements is given under the appropriate headings in the Supplement. Instructions and remittances can be sent to us direct or through the advertiser's correspondents in this country.



## AGENCIES.

6s. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

**HAMBURG.**—Wanted, for the sale of chemical-pharmaceutical glass ware, speciality medicine glass, a capable well-introduced Agent disposing of first-class references; German correspondence preferred. C. Harnack, Manufacturing Works and Warehouse of Chemical-Pharmaceutical Glass Ware and Utensils.

**A FIRM** in New South Wales, Australia, with a good connection amongst Chemists, Hospitals and Doctors is prepared to take two or three more Agencies. The principal is now in London, and would be pleased to call on manufacturers. Highest references can be given by well-known English manufacturers that this firm has acted for during the past 15 years. Please write to H. A. Reeves, Grand Hotel, London, W.C.2.

**MANUFACTURERS** of high-class products require active reliable agents with connections amongst Chemists, who can push good lines, bearing good commission. Apply, giving full particulars of other lines carried, etc., to 1/32 Office of this Paper.

**SHAVING** Brush Manufacturer requires first-class Agents for Colonies. Reply, P.C.B. 42/3, Office of this Paper.

**WELL-INTRODUCED** Wholesale House or Agent for pharmaceutical preparations wanted by industrial wholesale concern in Germany. Offers with references to Dr. Jvo Deiglmayr, Chemische Fabrik A.G., Munich 25 (Bavaria).

## FOR SALE.

**BARGAIN.**—Chemist's Wall Fittings, in good condition, range for shop rounds, 4 shelves, 14 feet x 9 feet, nest of drawers under, £15; another range, 3 shelves for display, 14 ft. x 9 ft., nest of drawers under, £15; dispensing screen, mirror centre, 9 ft. long, £12 10s.; solid mahogany counter, drawers under, 11 ft. 6 in., £15; return counter, 7 ft. 6 in., £7 10s.; or in one lot, £60; no agents. Apply 2/23, Office of this Paper.

**COUNTER** with mahogany top, 13ft. x 6in. long, 2ft. x 4in. wide; Glass Case to fit front of same, two Sponge Cases, one Tooth Brush ditto. Evans, 8, Station Road, Westgate-on-Sea.

**HANDSOME** Mahogany Counter Showcase, 60in. long, 25in. wide, 43in. high. What offers? Romano, 49 High Street, Wimbledon.

**MICROSCOPE**,  $\frac{3}{4}$  x  $\frac{1}{2}$  oil E. lens, triple eye piece, moving sub-stage, by Crouch, London; in excellent condition. Also set of Minor Slides. Lot worth £20. What offers? W. E. T., c/o 47 Hayter Road, Brixton Hill, S.W. 2.

**2 GROSS** Face Powder; size of box, 3in. x 3in. x 13in.; capacity, 3oz. What offers? Sample shilling. Leighton, 35 Gray's Inn Road, W.C. 1.

**50 GROSS** of one-dram square White Flint Bottles. What offers for whole or part? Reply, Box 932, T. B. Browne's Advertising Offices, 163, Queen Victoria Street, E.C.4.

## BUSINESSES WANTED.

**DRUG** Store Business wanted by unqualified man in a business thoroughfare; Western Midlands or Lancashire district preferred, but not essential; living accommodation an advantage. Send full particulars of rental, situation, purchase price, etc., in confidence, to 279/17, Office of this Paper.

**ESTABLISHED** Chemist's Business required in N., N.W., or W. districts; would take over lease, or if necessary purchase freehold. Reply to Garrett, White & Poland, 16, Hanover Street, W.1.

**GENUINE** Business required immediately, town or country, by two progressive Pharmacists, where there is plenty of scope for increasing business by initiative and enterprise; returns between £4,000 and £6,000 per annum; fullest investigation offered and expected; cash available; particulars treated in strictest confidence. Apply "Urgent," 1/22, Office of this Paper.

**PHARMACIST** is anxious to hear of genuine Business with good house, or of good opening for same in West of England or near; cash available, and any reasonable proposition considered. Fullest particulars, apply 1/15, Office of this Paper.

**PROPRIETARY** Article.—Wanted to purchase established Speciality with good connection among Chemists or allied Business. In first instance give fullest details, viz., annual turnover and net profit for three years, sample, and price for cash. Reply to "Private," 279/31, Office of this Paper.

## SALES BY AUCTION.

IMPORTANT TO CHEMISTS AND DRUGGISTS.

A Rare Opportunity.

ASHBOURNE, DERBYSHIRE.

VALUABLE FREEHOLD SHOPS, Warehouses, Stables, Dwelling House with large Garden, situate in the principal street of the important Market Town of Ashbourne, in which a large and successful Chemist's and Druggist's Business has been carried on for many years.

To be Sold by Auction by

**MESSRS. W. S. BAGSHAW & SONS**

At the "Green Man" Hotel, Ashbourne, on

SATURDAY, JULY 22, 1922, at 3 o'clock precisely.

For further particulars apply to the Auctioneers, or to Messrs. Holland, Rigby & Williams, Solicitors, both of Ashbourne, Derbyshire.

## BUSINESSES FOR DISPOSAL.

6s. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

**BIRMINGHAM DISTRICT.**—Business opened recently as Chemist's, unopposed, doing £20 weekly, corner shop, good house; 7 years' lease; population of district, 3,000 to 4,000; excellent opening of Photographics, Optics, etc.; unrivalled opportunity for live man to develop large business; price £730. Apply 2/16, Office of this Paper.

**CHELSEA, S.W.**—Drug Store (neglected), main road; immediate possession; 3 rooms (small, lofty); suit qualified lady or single man; N.H.I. required. If unqualified, mixed business necessary; nicely fitted. Inclusive price £250-£300; sine stock £205; agreement; part payment declined. Stamped, addressed envelope ensures reply. Letters. "Straightforward," 523 King's Road, S.W. 10.

**KENT** (main line, village and station).—Detached Freehold Business Premises, with good living accommodation and garden; price £650; Chemist's stock by valuation; only in market owing to death. Apply E. J. Parker, Auctioneer, Maidstone.

**LONDON, S.W.**—Genuine good-class Chemist's Business for Sale; good reason for disposal; returns about £2,500 p.a.; 16 years lease; low rent; Kodak agency; little opposition; good opening for optics; price £1,550. D.H., 2/37, Office of this Paper.

**MANCHESTER** (near), densely populated district.—Genuine Chemist's Business, elaborately fitted, fully stocked, Kodak agency; convenient 5-roomed house; very little opposition; price, including property, £4,000 for immediate sale; principals only. Reply 279/32, Office of this Paper.

**YORKS., W.R.**—Drug and Herbal Business for Sale, situated in main thoroughfare of large town, well fitted and stocked, every modern convenience, including electric light, gas and water; great scope for N.H.I., photography, and optical work; no immediate opposition; immediate possession if required; price £325 or nearest offer. Marsden, Chemist's Valuer, 44 Sholebrooke View, Leeds.

**WEST RIDING.**—Shopping centre for 50,000; growing; commanding position; large lock-up shop; N.H.I.; five doctors near; Kodak agency; takings £1,600; capable large increase; seller short of capital, and buying smaller business; lease five years, and renewable at £65, including rate; £1,200 cash; friend has house near; £800; vacant possession. "Rider," 2/4, Office of this Paper.

**FOR** immediate disposal and removal, Stock-in-Trade and Contents of Chemists and Fancy Stores. Very superior fixtures, largely of mahogany and glass cases with mirrored backs, covering two walls; handsome air-tight Show Case, glass shelves; good working stock. About £300. Early inspection and offers invited. Parkin, Ringwood, Hants.

**OLD-ESTABLISHED** Business in outer London for immediate Sale; steadily increasing returns; now £3,000; practically all cash; under manager; comfortable house and garden; price £2,200. Apply, 2/34, Office of this Paper.

**WELL-STOCKED** Suburban Drug Store (with several profitable agencies) for disposal in important East Lancashire town; good corner position and opportunities for development; established 9 years under present proprietor who is entering wholesale; stock and fittings about £775; price for quick sale £850. Write 8/235, Office of this Paper.



## PARTNERSHIPS.

6s. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

**BRITISH COLONY.**—An unique opportunity offers for a qualified Chemist to enter into Partnership in a most up-to-date business, or could purchase right out. Full particulars in exchange for banker's reference. Cash required, £3,000 partnership, or £5,500 purchase; in latter case terms would be arranged. Apply P.C.B. 43/18, Office of this Paper.

**OPENING** for experienced Qualified Partner (age 30-35); £400-£500 capital; extend existing business; excellent prospects; South Yorks. Particulars in confidence. 8/245, Office of this Paper.

**QUALIFIED Partner**, 25-35, experienced; £200-300 capital; good prospects. Particulars in confidence. Z. Y. Z. 280/11, Office of this Paper.

## SITUATIONS OPEN.

[HOME.]

### RETAIL.

6s. for 40 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

**BECKENHAM, KENT.**—Wanted, Lady Dispenser; reliable. Apply, giving full particulars as to age, height, salary required (outdoors), dispensing experience, and copies of two last testimonials. E. R. Jones, Chemist.

**HYTE, KENT.**—Required immediately, Male Assistant; good counterman. Henchley, 35 High Street.

**LEEDS.**—Qualified Manager required at once, either for locum or permanent. State salary required, age, full particulars of previous experience, and length of service and references. Murrys Pharmacies, Ltd., 221 Woodhouse Lane, Leeds.

**LONDON, S.E.**—Capable Junior wanted; good all-round experience, including Photography and Window-dressing; state age and salary required; applications not answered in five days respectfully declined. Baker, Chemist, 16 Church Street, Greenwich, S.E. 10.

**LONDON, S.W.**—Smart unqualified Assistant wanted, outdoors, for good-class cash business; photographic knowledge essential. Full particulars to Durhin, 19 Victoria Road, Surbiton.

**LONDON, S.W.**—Assistant, unqualified, about 25, with good all-round experience, as Locum for the month of August, with a view to a permanency. In reply, please give usual particulars as to age, experience, references, salary, etc., to 2/29, Office of this Paper.

**LONDON, W.**—Wanted, qualified Assistant; good dispensing experience. State full particulars and salary required. 221 High Street, Kensington, W.

**MANCHESTER.**—Unqualified Assistant as Locum for two weeks, July 28 to August 12, both dates inclusive; good Dispenser and Counterman; state salary required. W. V. Heath, 340 Great Clowes Street, Higher Broughton, Manchester.

**NEAR BRISTOL.**—Wanted, about end of August, young qualified Assistant for small branch; capable of taking charge; permanency for suitable man; light retail; hours easy. State full particulars in first case to Manager, c/o National Drug Co., Albert Road, Bristol.

**SHERINGHAM.**—Wanted, for about ten weeks, a young unqualified Assistant for Dispensing and Photographic business. Apply, giving full particulars, age, experience, and salary required (outdoors), to J. B. Gooch (W. H. Burrell & Co.), High Street, Sheringham, Norfolk.

**SOUTH DEVON COAST.**—Wanted, for summer season and possibly longer, Junior Unqualified Assistant (male); knowledge of photography; good counterman. References and salary required (outdoors) to 1/29, Office of this Paper.

**STAFFORDSHIRE.**—Wanted, unqualified Assistant, Dispensing and Counter, with knowledge of Photography preferred. State wages required. 2/14, Office of this Paper.

**A QUALIFIED Assistant** required for seaside pharmacy. South, lady or gentleman; one seeking permanency, capable of taking charge, and used to Dispensing, cash business, and Photography preferred; an interest in the business might be acquired. Please state age, experience, when free, and salary required, outdoors. 280/39, Office of this Paper.

**ASSISTANT** wanted immediately for season, unqualified; good Salesman and Dispenser; age about 28. Apply, giving usual particulars, to Bright, Chemist, Seaview, Isle of Wight.

**ASSISTANT** wanted, lady or junior; good dispensing experience essential, quick and capable; knowledge of photography useful. Please give usual particulars, details of experience, age, salary, and when free. H. Amon, Chemist, 435 High Road Streatham Common, S.W.

**HUNT & CO., Chemists, Winchester.**—Wanted, a qualified Assistant for the dispensing department; must be experienced, accurate and quick. Apply, with full particulars, to the above.

**JULY 31 to August 12 and from August 28 to September 9.**—Assistant for Dispensing and Stock (lady or gent.); hours 9-7.30, 1 p.m. Wednesdays, 8.30 Saturdays, two hours off for meals. State salary, experience, etc. F. Neal, 56, Knights Hill S.E.27.

**LADY Assistant** wanted; must have had good retail experience, no Sunday duty. Apply, stating age, experience, salary, required, to Wm. Fox & Sons, Ltd., 109, 111, 113, Bethnal Green Road.

**LOCUM (gentleman),** qualified, for N.H.I. Dispensing and general Counter work, for six weeks from July 24; no experience of wine and spirit department required. State lowest terms and full particulars in first letter please. J. Mariar & Son, Ltd. Chemists, Wine and Spirit Merchants, 49, 51 High Street, Halsted, Essex.

**LOCUM** wanted, August 14 to 28; must be well recommended. H. Clare, senior, 54 Oxley Road, Headingley, Leeds.

**LOCUM** wanted, indoors, any fortnight between August 14 and September 14. References and terms to J. F. Wilkinson, Chemist, 129 Ferham Road, Rotherham.

**MANAGER** required for London suburb; age 26-40; good prospects for a keen and tactful salesman with knowledge of photography and window-dressing. Apply, stating full particulars and salary required, to Parke's Drug Stores, Ltd., 65 Harmond Street, Kentish Town, N.W. For the convenience of provincial applicants, Sunday interviews could be arranged.

**PERMANENCY.**—By end July, unqualified Assistant, Dispensing, Counter, Windows, Photographic Developing, Printing; well recommended; reliable; elderly not objected to if energetic. Send photo, particulars, stating salary, age, height. Abstanter preferred. Two assistants kept. M., "Speedwell," Parkstone Road, Poole.

**PHARMACIST** required; permanency and good prospects. Apply, by letter, giving usual information, Timothy White Co., Ltd., Portsmouth.

**QUALIFIED Manager** required for retail shop (Midlands). Reply, stating experience, age, references, etc., to Rogers, Son & Page, Chartered Accountants, Milton Street, Nottingham.

**QUALIFIED Assistant Manager**, total abstainer, with an all-round experience, good salesman and window dresser, for an agricultural and mining town, to commence in a fortnight. Send usual particulars in first letter. Apply B. Ladd, 61, Paget Street, Cardiff.

**QUALIFIED Manager** for branch required. Applicants must have good dispensing, counter and photographic experience and possess undeniable references. Call, or send fullest particulars, age, salary, etc. Boutalls, Ltd., 150 Southampton Row, W.C.2.

**QUALIFIED Manager** required immediately; permanent and progressive position; state age, experience and salary required. "L," 2/2, Office of this Paper.

## RETURNING PHOTOS, &c.

Advertisers in this section who receive portraits and copies of testimonials from applicants with a stamped addressed envelope for reply, are reminded that the undue retention of these often means a hardship to the sender. All personal documents should be returned as promptly as possible after perusal.



**MART** up-to-date unqualified Assistant, capable of covering work, experienced in all branches; highest references for £10 salary. Call before noon, or appointment any time.ables, 147, High Road, Kilburn.

**EMPORARY** Assistant (qualified, male) for three weeks, August 8 to 26. Full particulars and salary required, E.thes, 143 High Street, Battersea, S.W.

**UNQUALIFIED** Assistant required; permanency and good prospects. Apply, by letter, giving usual information, tothy White Co., Ltd., Portsmouth.

**UNQUALIFIED** Junior for five weeks, July 24 to August 26 inclusive. Write, stating age, experience, salary required, Bromhall, Chemist, Thetford.

**UNQUALIFIED** Assistant, age about 27-30; excellent experience; energetic and trustworthy; permanent and progressive position to the right man anxious to give his best. unqualified," 2/200, Office of this Paper.

**UNQUALIFIED** Assistant required for Counter and Dispensing. Reply, giving experience, salary required and references. Those not answered within a week courteously declined. London, E. 1/35, Office of this Paper.

**WANTED** for season, capable Assistant for Dispensing Counter and Photography; no Sunday duty. Apply, stating whether qualified or unqualified and usual particulars, to Francis, Chemist, Tenhy, South Wales.

**WANTED**, a qualified Assistant for two months (may be a permanency), age about 30; capable of taking charge. Apply J. Byass-Jones, 331 West Green Road, Harringay, N.

**WANTED**, a qualified Working Manager for branch near Manchester; one accustomed to quick retail business and retail dispensing. State age, experience and salary required. Send photograph, if possible. 278/34, Office of this Paper.

## WHOLESALE.

**BY Department.**—Experienced Man required, capable of controlling staff. Please give particulars of experience and salary required, in first instance, to W. A. P., "Ucal," Enham.

**PERFUMERY and Toilet.**—Manufacturers require the services of a capable traveller for London district; applicants must have sound connection, and be able to show undeniable proof of selling ability. Write, giving fullest particulars, which will be treated in strictest confidence, to Spurway et Cie., 89 Gt. St. Martin Street, E.C.2.

**PRESENTATIVE** required in Wales for the sale of toilet soaps, perfumery and toilet preparations; applicant must have thorough knowledge of this trade and a live connection with chemists; liberal commission terms. Apply, giving full particulars and references, to 8/248, Office of this Paper.

**PRESENTATIVES** wanted, resident in following districts: Newcastle, Scotland, Devonshire, Somerset, Cornwall, on commission and part expenses, to carry compressed tablets and toilet goods, and photographic packed developers and chemicals. Apply to White Band Manufacturing Co., Ltd., Croydon.

**REQUIRED**, on purely commission basis, Travellers for London and Provinces to solicit orders for Continental and Perfumery Glassware. Only those with proved successful connections with the trade need apply. Address offer to J. C., c/o T. Dunnill Sykes, Ltd., 329 High Holborn, W.C. 1.

**AM Laboratory.**—Required for City Wholesale Druggist, assistant to take charge; previous experience essential and knowledge of making extracts, infusions, etc. Apply by letter, giving fullest particulars and salary required, to X.Y.Z., Office of this Paper.

**AVELLER**, London, for wholesale and shipping for toilet and tooth brushes, combs, hair ornaments, mirrors, etc.; position essential; existing one handed over; salary, commission and expenses. 45/400, Office of this Paper.

**AVELLER**, London and/or S. Coast for highest class well-established French perfumery; only those with first-class connections need apply; salary, commission and expenses. P.C.B., Office of this Paper.

**WANTED**, for London Patent House, Stock-keeper, pre-war experience, and up-to-date; only a man with first-class ability and ability entertained. Full particulars to 8/246, Office of this Paper.

**THERE** will shortly be a vacancy for a Junior Representative with some experience among the Chemists to cover South London and district.

The position calls for first-class salesmanship, energy and resource, and would appeal to the young man who is serious in his endeavour to make a position for himself.

The house he would represent is old established, and held in highest repute; the goods are packed lines, advertised specialties, novelties, etc. Salary, expenses and commission basis. Write, stating age, qualifications, and particulars regarding past experience, V.I.P., 8/247, Office of this Paper.

**WANTED.**—An unusual opportunity occurs for a Traveller with a wide connection among Druggists, especially in London and home counties; must be a quick and persistent worker, an exceptional salesman. A permanent position, plus £500 per year and commission, is open to the man who qualifies. Address in the first instance, stating qualifications, Box MA 06, St. Jas. Advtg. Co., 1 Wardour Street, W.

## [Colonial, Indian and Foreign.]

**CALCUTTA.**—Wanted, for old-established firm in India, Qualified Assistant, single, age under 24; 4 years' agreement. Salary, first year Rupees 400, second year Rupees 425, third year Rupees 450, fourth year Rupees 475 monthly; salary commences from date of sailing; passage paid out and home. Apply, giving full particulars of experience, etc., to P.C.B. 43/20, Office of this Paper.

**INDIA.**—Representative, single, qualified, wanted by firm of Manufacturing Chemists to travel in India and the East. Good prospects for capable and energetic man. Personal interview necessary. Apply, with full particulars of age, previous experience, etc., to 7/227, Office of this Paper.

## SITUATIONS WANTED.

### [HOME.]

### RETAIL.

2s. for 18 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

**A.A.A.**—CAPABLE Pharmacist; 34; single; disengaged; salary; any capacity or locality. D. S. S., 49, High Street, Clowne, near Chesterfield.

**A.A.A.**—LOCUM, highest references, well recommended; terms moderate. Brown, 74, West Hill, East Putney, London, S.W.15.

**A.A.A.**—QUALIFIED Dispenser, 26, single, desires situation; eight years' experience; accurate dispenser; smart window dresser; knowledge of photography. Dispenser, c/o Haslemere, Grove Lane, Christchurch.

**A.A.**—LOCUM or Manager; Manchester or Lancs. preferred; qualified; 36; 10 years' experience as manager. 1/19, Office of this Paper.

**A LADY** (minor) desires post, Doctor, Hospital, or Institution; 3 years' experience. Barnett, 7, Englewood Road, Balham.

**A PHARMACIST** (38) desires permanent engagement by September; good all-round experience; 4 years' West-End dispensing, 10 years' London managership; now locum tenens; good salesman; ability for increasing returns. "M.P.S." 1/40, Office of this Paper.



**A**GE 28 years, qualified, all-round experience, Counter, Dispensing, Photography; excellent references; assistant or manager; nine months' experience as manager; permanency. "C," 67 Edmund Road, Saltley, Birmingham.

**A**LL-ROUND (unqualified, 34); married; used to up-to-date methods, quick Counter, telling Window-dresser; 8 years last two situations; has had entire charge; would manage Drug Stores; London experience. 2/28, Office of this Paper.

**A**S Assistant Dispenser, age 27; married; two years' experience as Assistant Dispenser and Dresser. Apply M.L. 75250, Office of this Paper.

**A**S Assistant or Manager, unqualified, middle-aged, active, good address, tall; London and district preferred; state salary.—Eucryl, 218 Abbey Road, Barrow-in-Furness.

**A**SSISTANT, unqualified, age 28, 12 years' experience Counter and Dispensing; locum or permanency; disengaged. Apply, Smye, 49, Durham Street, Gosport, Hants.

**A**SSISTANT, 27, unqualified, whole or part time; good all-round experience; moderate salary; Birmingham or district preferred, but not essential. "X," 32, Ellesmere Road, Saltley, Birmingham.

**A**SSISTANT, unqualified, disengaged, 27; permanency; East End experience, Dispensing, Counter, Photography, and Window-dressing; excellent references; East London preferred. Apply, Arnold, 12, Lathom Road, East Ham, E.6.

**A**SSISTANT seeks berth in good class business; reliable dispenser, good counterman and photographer. "Metol," 30, Alfred Road, Feltham, Middlesex.

**A**SSISTANT (lady), Counter and Photographic experience; more dispensing experience required; London preferred. Willcocks, 70, High Street, Barnet.

**A**SSISTANT (unqualified), 32, married; 15 years' experience, Suburban and West End; disengaged; excellent references; competent Dispenser; locum or permanency; kindly state salary. Fenner, 8, Carnarvon Road, Leyton, E.10.

**A**SSISTANT, brisk Counter trade, light dispensing, windows, stock; moderate salary; Provinces; experience excellent; references satisfactory. "Provinces," 280/21, Office of this Paper.

**A**SSISTANT (21), six years' experience, desires relief or locum work, August and September; tall, good Counterman and Dispenser; Liverpool district preferred. 280/20, Office of this Paper.

**A**SSISTANT, unqualified, experienced, highly recommended, desires post in Bath or within 20 or 30 miles. "Chemicus," 1/4, Office of this Paper.

**A**SSISTANT (23) requires berth; permanent preferred; good experience; moderate salary; disengaged end July. Ion, 3, Cinema Buildings, Clevedon.

**C**HEMIST; age 22; single; Honours, B.Sc. (London), French and German; six months' experience in Photographic Developers, one year in Royal Engineers; excellent references; nominal salary. Apply M.L. 54810, Office of this Paper.

**C**HEMIST (ex-Service), age 23, single, B.Sc. (Vict.); French and German; experience in Photography; industrious and willing to travel; good references. S. Kelly, 8, Greame Street, Whalley Range, Manchester.

**C**HEMIST'S Assistant; age 42; war service, 15 months; 13 years' experience as Chemist's Assistant. Apply M.L. 8656/21, Office of this Paper.

**D**ISPENSER, permanency or locum; dressings, book-keeping, Doctor, Institution; good experience; excellent testimonials. W., 37, Easton Street, High Wycombe.

**D**ISPENSER (Hall), Hospital experience, book-keeping, type-writing; post with Doctor or first-class Chemist. Miss White, 131, Welholme Road, Grimsby.

**D**ISPENSER to Doctor or Chemist; unqualified; excellent reference. Innes, 2 Ferndale Road, Weymouth.

**D**ISPENSER, lady (Hall); 7 years' experience Hospital, Surgery (Bookkeeping); excellent testimonials. Miss Millard, The Villas, Aston, near Stone, Staffordshire.

**D**ISPENSER (Hall), 28, married, requires temporary or permanent post with Chemist or Doctor in E. London. L., 175 Harold Road, Upton Manor, E.13.

**D**ISPENSING experience, good class (not N.H.I.), sought by qualified young man; at liberty beginning of October; 23; 6 ft.; energetic; well educated. Greatorex, Kirkwood, Newark-on-Trent.

**E**LDERLY, qualified; disengaged; active; wide experience; years last employ; moderate salary. Kelly, 8 Lady Park, Lewisham.

**E**XPERIENCED Assistant, Surgical Instruments Appliances, seeks situation, age 25; excellent references; good knowledge Chemist Sundries and Book-keeping; London Provinces. P.C.B. 43/19, Office of this Paper.

**H**OLIDAYS.—Chemists, London and Suburbs.—If your reg. Locum not available, please write me; middle age; experienced Pharmacist and side lines. Your business conscientiously managed during absence. References from our mutual whole friends. 279/18, Office of this Paper.

**J**UNIOR, 24, seeks re-engagement; five years' Dispensing experience; three years' brisk, good class, Retail business N.H.I.; moderate salary with necessary opportunity after 1 month from Retail; Chatham district preferred, not essential; Doctor's son; ex-Army instructor. 280/27, Office of this Paper.

**J**UNIOR (24), good-class, all-round experience; good Window-dresser; excellent references; seaside or inland. Apply Office of this Paper.

**K**EEN, energetic Junior Improver (18) requires situation. D. H. Barton, Bay Tree Cottage, Malvern Wells.

**L**ADY Dispenser (Minor and Hall), experienced, desires locum or permanency, in or near London preferred. 280/21, Office of this Paper.

**L**ADY, with two daughters (one at school abroad), request post as housekeeper; accustomed to assisting in Chemist business; highest references; full particulars on application. 278/40, Office of this Paper.

**L**ADY Dispenser, Hall certificate, disengaged; Doctor's only; permanency or locum; country preferred. 279/24, Office of this Paper.

**L**ADY Dispenser (24), qualified, experienced, requires post, winter or autumn; Doctor or Institution. 60 Gloucester Gardens, Bayswater, W.2.

**L**OCUM or permanency, qualified, 26; experienced; North London preferred; disengaged September 2. Proctor, 2, Higham Place, Newcastle-on-Tyne.

**L**OCUM, unqualified, London and Provincial experience; recommended; used to control; good address; abstained from alcohol July 29 to August 12; one subject to take in M.L. A. G. Ramsden, 16a, East Parade, Huddersfield, Yorkshire.

**L**OCUM, qualified; disengaged; Prescriber; elderly, active; wide experience; reliable. B. Griffiths, 6 Newcastle Road, Bridgend, Glam.

**L**OCUM Tenens.—Post desired July and August, doctor, Institution or Chemist. Lady dispenser, Hall (clergyman's daughter); medical book-keeping; excellent references; hospital experience. Miss Rumsey, 28 Regent Street, Oxford.

**L**OCUM or permanent; disengaged; thoroughly competent Window-dresser; abstainer; unqualified. A., 39 St. Thomas Road, Finsbury Park, N.

**L**OCUM, disengaged July 22; abstainer; excellent references; London S.W. district preferred. Alpha, c/o Griffiths, Pharmacist, Wokingham, Berks.

**L**OCUM or Branch Manager, 50, qualified; wide experience; disengaged; references. Pharmacist, 38, Wendover Road, Harlesden, N.W.

**L**OCUM or permanent; "Hall" certificate; book-keeping; excellent testimonials; Doctors' or Hospital post preferred. Farrow, Weymouth and District Hospital.

**L**OCUM or holiday relief; reliable; reasonable; City, W. End, and Hospital experience; disengaged; best references. "Lychen," 65 Pevensey Road, Eastbourne.

**L**OCUM or otherwise; thoroughly experienced Dispensing Retail; tall, active, and energetic. "Qualified," 55 Brompton Road, Clapham Junction.

**L**OCUM; excellent references; write for dates; experienced in all branches; moderate salary; qualified Chemist. 4 Ormeau Terrace, Cheltenham.

**L**OCUM; town, country preferred; 58; Hall qualification; mixed experience, clean appearance, abstainer, disengaged July 22, healthy, active; formerly head Dispenser. Vera, Princess Street, Ashton-under-Lyne.

**L**OCUM, qualified, experienced, has vacant dates, July 17 to August 7 to 26; Birmingham area. "Optician," 2/9, Office of this Paper.



UM, Dispensing and Book-keeping, for Doctor or Chemist from July 21 till September 15; well recommended. Miss 1/23, Office of this Paper.

UM (40), qualified, capable, experienced; vacant until end of September. Address P.C.B. 43/24, Office of this Paper.

VAGING Assistant, 34; excellent references; thorough knowledge of Drug Trade and Photography. 280/29, Office Paper.

VAGING Assistant on premises; elderly, married, no family; honest, sober, industrious; unqualified; Photo- dentistry. Scott, 2, Eastwood Road, Goodmayes.

LIFIED Chemist seeks position as Assistant or Branch manager; 2nd Lieut.; age 23; single; six years' West-End experience. Apply, M.L., 1445/22, Office of this Paper.

LIFIED as Locum, or permanent position of trust; elderly, experienced. Pharmacist, 49, Greenfield Road, Colwyn Bay,

LIFIED Chemist requires position, Locum or permanency; disengaged July 20; booking forward; references. Chemist, Milton Road, Golders Green, N.W.11.

LIFIED (22), desires post as Assistant in good class business, London or West of England; good reference; inter- A. Hodgkinson, 4, Grantham Terrace, Stockwell, S.W.9.

LIFIED, middle aged, various, experienced, permanency Locum, Manager or Assistant; Lancashire district pre- last reference eight years; at liberty July 25. Chemist, rwood Street, Fallowfield, Manchester.

LIFIED Locum, competent, reliable; disengaged July 22 September 2; highest references. Jones, 57 Brown Road, amslow, Essex.

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